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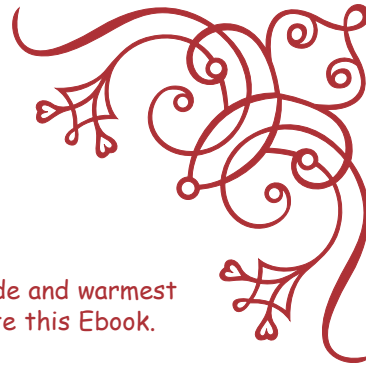
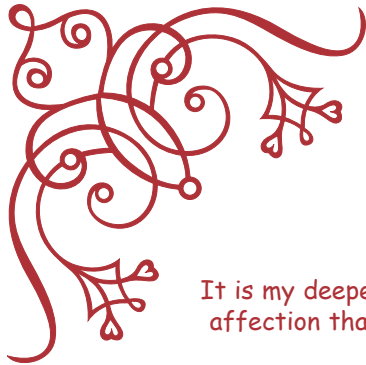
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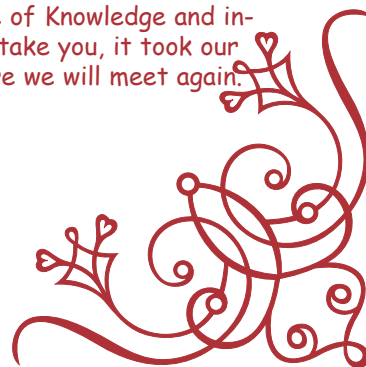
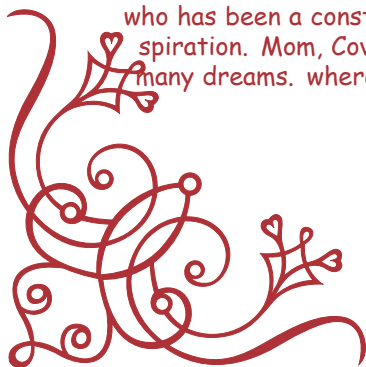


This E-book is dedicated to the loving memory of my mother:
my guiding light, my shining star,
forever



It is my deepest gratitude and warmest
affection that I dedicate this Ebook.

To my mother JOYTSNA CHANGDER
who could not see this Ebook.



who has been a constant source of Knowledge and in-
spiration. Mom, Covid did not take you, it took our
many dreams. wherever you are we will meet again.



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Preface

This book presents a comprehensive collection of over **1,20,000 multiple-choice questions (MCQs)** covering the complete syllabus of **UGC NET Paper 1**. The questions have been carefully organized chapter-wise and topic-wise to facilitate systematic learning, regular practice, and effective revision.

Prepared in accordance with the latest syllabus, this question bank is intended to help learners strengthen their conceptual understanding, improve speed and accuracy, identify areas requiring further study, and build confidence through continuous practice.

This book is particularly useful for:

1. UGC NET and Junior Research Fellowship (JRF) aspirants.
2. State Eligibility Test (SET/SLET) candidates.
3. Assistant Professor recruitment examinations.
4. Ph.D. entrance examinations.
5. University students and research scholars.
6. Teachers and educators seeking practice material.
7. Candidates preparing for other competitive examinations covering teaching aptitude, research aptitude, reasoning, communication, information and communication technology, and higher education.

The primary objective of this book is to provide an extensive repository of practice questions that supports self-learning, systematic revision, and exam-oriented preparation. Whether used for daily practice, mock tests, or last-minute revision, this question bank serves as a valuable companion throughout the preparation journey.

Every effort has been made to ensure the accuracy, relevance, and quality of the contents. Suggestions and constructive feedback from readers are always welcome and will help improve future editions.

Narayan Changder

July 2026

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1. Unit-VII: Data Interpretation

1.1 Fundamentals of Data

1.1.1 Data Interpretation

1. A graph shows the number of hours students study each week. If one student studies for 10 hours and another for 15 hours, what is the total study time?
(A) 5 hours
(B) 30 hours
(C) 20 hours
(D) 25 hours
2. What is the difference between the number of students passed with 30 as cut-off marks in chemistry and those passed with 30 as cut-off marks in aggregate?
(A) 3
(B) 4
(C) 5
(D) 6
3. How many students scored between 80-89 on the math test?
(A) 13
(B) 14
(C) 15
(D) 16
4. Determine which is the better buy. Package A has 20 pens for \$5. Package B has 7 pens for \$2.
(A) Package A
(B) Package B
5. Based on current data about species population trends, some scientists claim we are in the middle of Earth's sixth ____
(A) Biodiversity
(B) Endemic
(C) Treaty
(D) Mass extinction
6. Which is an example of an appeal to logos?
(A) An author might refer to work credentials, degrees, etc. The writer can also "borrow" credibility by citing evidence from another author who is an expert in the topic.
(B) Appealing to the audience's emotions to invoke empathy and/or sympathy towards the topic as well as the author
(C) Using data, statistics, relevant evidence/examples, and any other forms of proof appropriate to the topic
(D) None of above
7. The figure shows the shape of the dataset. Based on that, which of the following statements are correct? (Select 2 options)

- (A) There are a total of 2 data in the dataset
(B) There are a total of 5 data in the dataset
(C) Each data has 2 features
(D) Each data has 5 features
8. In a class, $\frac{2}{5}$ of the children are boys. What fraction are girls?
(A) $\frac{2}{5}$
(B) $\frac{4}{5}$
(C) $\frac{3}{5}$
(D) $\frac{1}{5}$
9. At Mario's Italian restaurant, 118 of the 200 plates are dirty. What percent of the plates are clean?
(A) 37%
(B) 41%
(C) 59%
(D) 63%
10. How many students scored 40% or below on the test?
(A) 21
(B) 22
(C) 20
(D) 15
11. What fraction of the students chose Green as their favourite colour?
(A) $\frac{1}{10}$
(B) $\frac{1}{4}$
(C) $\frac{1}{2}$
(D) None of above
12. The graph shows the number of colored beads used to make a necklace. How many purple and green beads were used in all?
(A) 23
(B) 20
(C) 18
(D) 15
13. What is the median of the following data? 2, 1, 3, 2, 1, 1, 2
(A) 1
(B) 2
(C) 2.5
(D) 3
14. What was the main aim of League Tables
(A) Raise Standards
(B) Create inequality
(C) Reduce inequality
(D) Create super schools
15. What statement is best supported by the data in the figure above?
(A) Over 40% of all public transportation trips are taken by rail of some kind.
(B) More people travel via paratransit than via ferry.
(C) 45% of all miles traveled on public transportation are traveled by rail of some kind.
(D) Over half of all users of public transportation are bus riders.
16. The teachers at XYZ School have taken the information from test scores, as well as attendance and dropout rates, to use in planning for student needs. This practice is called ____
(A) Benchmarking.
(B) Disaggregating data.
(C) Data-based decision making.
(D) Using reliability.
17. There are 80 guests at a wedding reception. 30% do not eat meat. How many guests do not eat meat?
(A) 24
(B) 30
(C) 50
(D) 56
18. What inference can be drawn from the chart?
(A) Yellowfin tuna swim faster than Bluefin Tuna
(B) Bluefin Tuna swim faster than Yellowfin Tuna
(C) All tuna fish in the ocean swim slowly
(D) Yellowfin Tuna swim faster than Sailfish

19. Mode is ____
(A) Least frequent value
(B) Middle most value
(C) Position value
(D) Most frequent value
20. Look at the table on your sheet for questions 15-21. What % of iodine is left if 5 half-lives have passed?
(A) 100%
(B) 12.5%
(C) 3.125%
(D) 1.56%
21. The graph shows the masses of some pumpkins grown on an allotment. What is the median?
(A) 15
(B) 14
(C) 10
(D) 18
22. Quickly glance through a message to find specific information
(A) Bias
(B) Boilerplate
(C) Presumption
(D) Scan
(E) Reading for comprehension
23. If 25 students liked mathematics, 20 liked science and 10 students liked both subjects. All the students like at least one subject. How many students are there? (You may want to use a Venn Diagram to organize)
(A) 55
(B) 45
(C) 35
(D) 25
24. The average amount of money a school district spends to educate one student for one year.
(A) SPENDING PER PUPIL
(B) SCHOOL FUNDING GAP
(C) ACHIEVEMENT GAP
(D) EXPULSION
25. Clay has 5 years to save money for a car. He wants to invest \$800 in the bank. He has 2 banks to choose from. Wells Fargo offers a simple interest account with a rate of 4%. Chase Bank offers a compound interest account with a rate of 4%. Which bank will provide Clay with the most money after 5 years?
(A) Wells Fargo
(B) Chase Bank
26. An application program that helps the user to change any number and immediately see the result of that change is
(A) Desktop publishing program.
(B) Database.
(C) Spreadsheet.
(D) All of above.
27. Median of 2,3,3,4,5,4
(A) $\frac{7}{4}$
(B) 3.5
(C) 1
(D) None of above
28. It is a process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information.
(A) Methodology
(B) Data Analysis
(C) Research
(D) Researcher
29. A classroom has a chart showing the heights of students in centimeters. If Sarah is 140 cm tall and Tom is 135 cm tall, who is taller and by how many centimeters?
(A) Tom is taller than Sarah by 10 cm.
(B) Tom is taller than Sarah by 5 cm.
(C) Sarah is taller than Tom by 5 cm.
(D) Sarah and Tom are the same height at 140 cm.

30. Describe the data distribution shape of the graph.
(A) Skewed right
(B) Skewed left
(C) Uniform
(D) Symmetrical
31. An art gallery has 27 paintings for sale, each at a different price. The median price of the paintings is \$250. How many of the paintings have a price higher than \$300?
(A) 10
(B) 12
(C) 13
(D) 14
(E) Not enough information is given
32. The chart shows how many students attended the Adult Learning Centre each day. What is the range of the number of students,
(A) 13.5
(B) 13
(C) 15
(D) 14
33. Katie asked her friends their favorite food. Select the number of tally marks for Hot Dog.
(A) 3
(B) 4
(C) 5
(D) 6
34. What is the first thing you have to do in a spreadsheet before you can create a chart/graph?
(A) Click insert charts/graphs
(B) Go to file, print
(C) Highlight the data with your mouse
(D) Bold all the information
35. A process of gathering information about students' needs and making course decisions based on that information is called?
(A) Need Analysis
(B) Goals & Objectives
(C) Course Management
(D) Curriculum Design
36. Determine whether the statement represents additive or multiplicative reasoning. Melanie is 8 years old and Justin is 4 years older than Melanie.
(A) Additive Reasoning
(B) Multiplicative Reasoning
37. Data submitted for Quantitative Metrics are subjected to
(A) Data Validation and Verification
(B) Peer Team Review
38. Total distance divided by total time, for an object shows:
(A) Acceleration
(B) The size of one's toupee
(C) Absolute speed
(D) Average speed
39. Identify the outlier for the given data? 23, 34, 27, 7, 30, 26, 28, 31, 34
(A) 7
(B) 23
(C) 31
(D) 34
40. Which is used to describe information in your spreadsheet?
(A) Label.
(B) Custom Margins.
(C) None of the above.
(D) All the above.
41. The charts give information about the types of books that British men and women and different age groups buy. The initial impression from the charts is that women tend to buy 1. ___ books than men overall, although they buy slightly 2. ___ non-fiction books. The people that buy the 3. ___ books are in the 45+ age group.
(A) Fewer, more, most
(B) More, fewer, most

- (C) Most, more, fewer
(D) None of above
42. Jack made this graph to show the number of movies that were rented from his store during four months. Which whole number shows how many more movies were rented in December than in September?
(A) 20
(B) 35
(C) 45
(D) 80
43. Which is not the part of Pivot table
(A) Row
(B) Column
(C) Text
(D) Data
44. A statistical procedure for examining the combined relationship of multiple independent variables with a single dependent variable is
(A) Multiple regression
(B) Regression line
(C) Partial correlations
(D) Degree of association
45. Mr. Chapman went to the comic store and bought four graphic novels. Each one had a different price. Which group represents the costs of the four graphic novels in order from most expensive to least expensive?
(A) \$14.05, \$13.35, \$13.05, \$14.35
(B) \$14.35, \$13.35, \$13.05, \$14.05
(C) \$14.35, \$14.05, \$13.35, \$13.05
(D) \$14.35, \$14.05, \$13.05, \$13.35
46. Choose the sentence that describes the data in the tally chart.
(A) Pizza had 10 votes.
(B) Pizza got the most votes
47. Rangers at Lee Lake stocked the lake yesterday with a total of 83,000 fish. 6,031 of the fish were trout and the rest were catfish. How many of the fish were catfish?
(A) 89031
(B) 13.76
(C) 76969
(D) None of these
(E) Not enough information is given
48. In a group of 50 people, 25 like chocolate, 30 like vanilla, and 10 like both. How many like neither?
(A) 15.0
(B) 20.0
(C) 25.0
(D) 30.0
49. The pictograph shows the favourite musical instrument chosen by a group of children. How many more students prefer to choose violin than drum?
(A) 1
(B) 2
(C) 5
(D) 10
50. What is the collective name for the mean, mode and median?
(A) Measures of Quantitative Tendency
(B) Measures of Central Tendency
(C) Measures of Central Spread
(D) Measures of Interpretation
51. The Oxford Soup Company recorded the number of rotten tomatoes in each barrel it received. How many barrels had less than 100 rotten tomatoes?
(A) 13
(B) 15
(C) 16
(D) 17
52. A graph shows the number of hours students study each week. If 10 students study an average of 5 hours, how many total hours do they study?
(A) 30 hours
(B) 70 hours
(C) 40 hours
(D) 50 hours

53. Result of study based on evidence and observation.
- (A) Instruments
 - (B) Data
 - (C) Participants
 - (D) Methodology
54. Select the statements below that are true about the graph
- (A) Swimming was the most popular summer sport.
 - (B) Nine more people like surfing than swimming.
 - (C) Water Skiing, Boating, and Diving were equally popular.
 - (D) None of above
55. What do you call when most of the data is located in a certain area on a graph?
- (A) Cluster
 - (B) Gap
 - (C) Peak
 - (D) Data Party
56. The DMO analyzes the UGC already on the various websites and finds the sites where the information was posted and uses it to analyze and create new strategy
- (A) Mimetic strategy
 - (B) Analytic strategy
 - (C) Advertising strategy
 - (D) None of above
57. This line in a graph runs straight up and down
- (A) Horizontal axis
 - (B) Vertical axis
 - (C) Row
 - (D) Column
58. How many students scored more than 30 marks?
- (A) 29
 - (B) 27
 - (C) 31
 - (D) 60
59. If the city of Amarillo has a population of 190,695 and I round to the nearest thousands place. What is the correct answer?
- (A) 191,695
 - (B) 191,000
 - (C) 21,000
 - (D) 32,695
60. How many students were greater than 55 inches tall but less than 70 inches tall?
- (A) 13
 - (B) 15
 - (C) 16
 - (D) 17
61. The following statements are included in the Presentation of the Gathered Data except one.
- (A) Presentation of the Recurring Patterns and Themes
 - (B) Analysis and Interpretation of the Data
 - (C) Photo of all the participants during the conduct of the SLAC
 - (D) Reflection on the Evidence
62. Based on the data in the graph, you can conclude the highest concentration of crabs was where?
- (A) Coquina rock-low intertidal zone
 - (B) Basalt rock-low intertidal zone
 - (C) Coquina rock-middle intertidal zone
 - (D) Basalt rock-middle intertidal zone
63. Assuming the following plot records the grades my students made last semester, how many of my students made a "C" (70-79) in my course?
- (A) 5
 - (B) 6
 - (C) 7
 - (D) 8
64. A collection of numbers or values that relate to a particular subject usually portrayed in a relational database table. Example: column header and row contents for test scores for each student. This is the definition of
- (A) Data set

- (B) Useful data
 - (C) Usable data
 - (D) Structured data
 - (E) Data persistence
65. There is an office consisting of 38 people. 10 of them like to play golf, 15 like to play football and 20 neither play golf nor football. How many like both golf and football?
- (A) 10
 - (B) 7
 - (C) 15
 - (D) 18
66. Which of the following is a benefit of learning analytics in universities?
- (A) Increased administrative costs
 - (B) Improved student outcomes
 - (C) Reduced course offerings
 - (D) Less focus on data-driven decisions
67. Which of the following types of software is for organizing, analyzing, and storing data in a table?
- (A) Spreadsheet software
 - (B) Multimedia software
 - (C) Desktop publishing software
 - (D) Database software
68. A graph shows the number of books read by students in a month. If 15 students read 3 books each, how many books were read in total?
- (A) 45
 - (B) 75
 - (C) 60
 - (D) 30
69. On a plate of wings, there are mild and hot wings. In a sample of 10 chicken wings, 4 are hot wings. If there are 50 wings on the platter, estimate how many are hot.
- (A) 25/50
 - (B) 20/50
 - (C) 16/50
 - (D) None of above
70. How many total cyclists are represented in the data?
- (A) 20
 - (B) 24
 - (C) 18
 - (D) 22
71. The mode score on the Algebra test was 94. Which of these interpretations must be correct?
- (A) 99 was the highest score
 - (B) More students received a 94 than any other score
 - (C) No student scored below a 50
 - (D) A score of 91 was slightly below the average
72. Specific instances that explain a general factual statement
- (A) Numbers and stats
 - (B) Quoted words
 - (C) Anecdotes
 - (D) Examples
73. Arun plotted a chart where the months (Jan, Feb, Mar, Apr) are shown on the horizontal axis and the company's sales amount is shown on the vertical axis. Here, months represent:
- (A) Values
 - (B) Categories
 - (C) Legends
 - (D) Gridlines
74. The dot plot represents the last price paid per gallon of gas. How many people paid \$1.98 or more for a gallon of gas?
- (A) 6
 - (B) 3
 - (C) 9
 - (D) 4
75. State the number pattern below. 869 007, 859 007, 849 007, 839 007, 829 007
- (A) Ascending order by hundreds
 - (B) Ascending order by thousands
 - (C) Descending order by ten thousands
 - (D) Descending order by hundred thousands

76. According to this chart, in which month are produce sales the highest?
(A) June
(B) March
(C) November
(D) May
77. Four candy stores are competing with each other. Which store offers the best buy for candy?
(A) Sweet Store: 12 pack for \$3.00
(B) Delicious Treats: 22 pack for \$4.62
(C) Sugar Factory: 18 pack for \$5.40
(D) Chocolate Shop: 36 pack for \$7.20
78. In a certain community, 30% of households have 1 child, 43% have 2 children, and 27% have 3 children. If a household is selected at random, what is the expected number of children in that household? HINT: It may be helpful to make a probability distribution table.
(A) 2.00
(B) 2.13
(C) 1.97
(D) 1.27
79. A machine dispensed red gumdrops into bags of various sizes. How many bags had at least 15 red gumdrops?
(A) 33
(B) 23
(C) 25
(D) 27
80. Which month had the biggest difference between the high and low temperatures?
(A) January
(B) April
(C) October
(D) November
81. In sequential embedded design, Qualitative data can be collected ____ Quantitative data?
(A) Before
(B) After
(C) Both A & B
(D) None of above
82. How many more pizzas were sold by Uncle John's Pizza than Little Secrets Pizza?
(A) 40
(B) 200
(C) 210
(D) 45
83. A collection of related values, such as one row or one column from a spreadsheet.
(A) Gridline
(B) Legend
(C) Tick Mark
(D) Data Series
84. Making a statement or a claim about what happen in the future based on past experiences or evidence
(A) Predicting
(B) Observing
(C) Classifying
(D) Inferring
85. Codes consisting of lines of varying widths or lengths that are computer-readable are known as ____
(A) A magnetic tape.
(B) An OCR scanner.
(C) A bar code.
(D) None of these.
86. Use the tally chart to answer the question. Which game did most children choose?
(A) Card Game
(B) Board Game
(C) Bingo Game
(D) None of above
87. What is the range of the data?
(A) 6
(B) 8
(C) 10
(D) 4

88. If a tally chart shows 15 tallies for cats, how many cats are there?
(A) 5
(B) 20
(C) 10
(D) 15
89. Choose which data mining task is the most suitable for the following scenario: Identifying an unexpected/unusual amount of spending
(A) Prediction
(B) Sequential pattern analysis
(C) Association rules
(D) Anomaly detection
90. Two-thirds of the students in your class are boys. One-eighth of the boys play soccer. What fraction of the kids in your class are boys who play soccer?
(A) $\frac{3}{11}$
(B) $\frac{1}{4}$
(C) $\frac{1}{12}$
(D) $\frac{1}{5}$
91. Which age groups had 20 to 30 people who favor M&M s?
(A) Age 6-10
(B) Age 21-25
(C) Age 6-10 AND age 26-30
(D) All ages
92. Facts in the form of numbers is called ____
(A) Mean
(B) Median
(C) Statistics
(D) Range
93. The chart above represents what special events students like. The result shows 3 students chose Birthday, 6 students chose Christmas, 7 students chose Halloween, 5 students chose Thanksgiving and 5 students chose Valentine. What is the least popular event, and what fraction of total participants is it?
(A) Birthday, $\frac{3}{26}$
(B) Birthday, $\frac{3}{13}$
(C) Thanksgiving, $\frac{5}{26}$
(D) Thanksgiving, $\frac{3}{5}$
94. Which of the following is an essential part of a table?
(A) Graph
(B) Title
(C) Equation
(D) Analysis
95. Lizzy had test scores of: 72, 94, 108, 60 What is the RANGE of her test scores?
(A) 12
(B) 72
(C) 48
(D) 98
96. In a class of 40, 12 students prefer taking French Language as elective subject, 15 prefer Chinese Language, and 8 like to learn both languages. How many students prefer neither of the two languages?
(A) 19
(B) 21
(C) 23
(D) 25
97. In 2015 there were 58,610 robberies in Caloocan and the population was 500,000. What is the crime rate of Caloocan?
(A) 11,777
(B) 11,722
(C) 9,633
(D) 87,009
98. This is putting the results of experiments into graphs, charts and tables.
(A) Collection of Data
(B) Presentation of Data
(C) Presentation of Facts
(D) Analysis of Data

99. The rate for ONE unit of a given quantity
(A) Unit Rate
(B) Ratio
(C) Unit Cost
(D) Proportion
100. What is the difference in the number of 35AH batteries sold in 1993 and 1997?
(A) 45000
(B) 39000
(C) 89000
(D) 57000
(E) 39500
101. Temperatures were taken after every 10 minutes for 4 experiments. Which of these experiments have a proportional relationship?
(A) Experiment 1
(B) Experiment 2
(C) Experiment 3
(D) Experiment 4
102. Which of the following best describes inductive guided inquiry?
(A) A method that only involves direct instruction.
(B) A method where students are given specific data and asked to make generalizations.
(C) A method that avoids the use of observations.
(D) A method that is exclusively used at the university level.
103. What fraction of the students chose Blue as their favourite colour?
(A) $\frac{1}{2}$
(B) $\frac{1}{4}$
(C) $\frac{1}{20}$
(D) $\frac{1}{3}$
104. What was the total amount of candy sold during the school year shown in the graph?
(A) 43
(B) 35.5
(C) 23
(D) 27.5
105. The chart above shows the number of pies sold by Jack, Tom, Stefan and Amir. If there are 800 pies altogether, how many pies did Jack sell?
(A) 200 pies
(B) 320 pies
(C) 400 pies
(D) 450 pies
106. Which statement best explains how literacy rates affect the standard of living?
(A) Higher literacy rates usually lead to a higher standard of living
(B) Literacy rates have no impact on a country's development
(C) A lower literacy rate means people are more qualified for jobs
(D) Literacy rates only matter for countries with command economies
107. You want to set such that when you type Baishakh and drag the fill handle, Excel should produce Jestha, Aashadh and so on. What will you set to effect that?
(A) Custom List.
(B) Auto Fill Options.
(C) Fill Across Worksheet.
(D) Fill Series.
108. How many more mobile phones were sold in 2014 than in 2010?
(A) One million
(B) Two million
(C) Three million
(D) Four million
109. How do you determine the number of students with all three streaming services using a Venn diagram?
(A) Look for the union of all three sets in the Venn diagram.
(B) Count the total number of students in the diagram.

- (C) Look for the intersection of all three sets in the Venn diagram.
- (D) Add the number of students in each individual set.
- 110.** Share Price of Company X at the beginning of year is Rs.100 & at the end of year is Rs.120. Dividend per share is Rs.6. What should be the return from this security?
- (A) 26%
- (B) 16%
- (C) 6%
- (D) 8%
- 111.** Which sentence is most likely from an argumentative text?
- (A) Once upon a time, in a faraway land —
- (B) The data clearly shows a 20% increase in sales.
- (C) The sun set over the horizon, painting the sky red.
- (D) She felt a deep sense of nostalgia.
- 112.** Which form of correlation does the given data set have? Increase in time spent playing sports, decrease in grade point average.
- (A) Positive Correlation
- (B) No Correlation
- (C) Discriminating Correlation
- (D) Negative Correlation
- 113.** Does this graph represent a proportional relationship?
- (A) No, because it doesn't pass through the origin.
- (B) Yes, because it doesn't pass through the origin.
- (C) Yes, because it intersects the y axis.
- (D) No, because it intersects the x axis.
- 114.** Match the clue word with the operation: QUOTIENT
- (A) Add
- (B) Subtract
- (C) Multiply
- (D) Divide
- 115.** An instructional technology coordinator has observed a marked reduction in the number of students using the computer lab before and after school. The school principal suggests that the coordinator conduct a student survey and examine the results to determine possible solutions to the problem. The principal's suggestion is an example of:
- (A) Action research
- (B) Case study
- (C) Experimental research
- (D) Longitudinal study
- 116.** A set of data usually ordered pairs
- (A) Independent Variable
- (B) Dependent Variable
- (C) Function
- (D) Relation
- 117.** Several numbers, some of which are the same, are represented by variables and arranged in order from least to greatest. The list of numbers is as follows: a, b, b, c, d, d, d. What is the median of the numbers?
- (A) C
- (B) D
- (C) D-a
- (D) $(a+b+c+d)/4$
- 118.** Roger bowled 7 games last weekend. His scores are: 155, 165, 138, 172, 127, 193, 142. What is Roger's median score?
- (A) 127
- (B) 155
- (C) 156
- (D) 193
- 119.** The point on the number line represents the cost of airfare to Thailand. Which statement describes the cost of airfare to Thailand?
- (A) The cost of airfare is closer to \$2000 because the point is located after the midpoint.
- (B) The cost of airfare is less than \$1000.
- (C) The cost of airfare is closer to \$1000 because the point is located before the midpoint.
- (D) The cost of airfare is greater than \$2000.

120. The number of students scoring less than 40% in aggregate is
(A) 13
(B) 19
(C) 20
(D) 27
121. Choose the incorrect statement.
(A) About 20 patients were discharged on Thursday.
(B) On Tuesday, a total number of 300 patients got discharged.
(C) More than 100 patients were tested negative and discharged on Monday.
(D) The difference between the number of discharged cases on Wednesday and Thursday is about 100.
122. According to this graph, for every 24 hrs, about how many hours are spent socializing and watching TV?
(A) 4 hrs
(B) 2 hrs
(C) 5 hrs
(D) 6 hrs
123. Marketing Research is used to learn more about ____
(A) Consumer
(B) Market
(C) Consumer & Market for decision making
(D) Government policy
124. The mode score on the 6th grade math test was 94! Which of these interpretations must be correct?
(A) 99 was the highest score on the test.
(B) More students received a 94 than any other score
(C) No student scored below a 50
(D) A score of 91 was slightly below average.
125. Kade, Jaxon, and Zane each brought snacks to their Valentine's Day party. Kade brought 53 snacks. Jaxon brought 21 snacks. Zane brought 19 snacks. What was the difference between the amount of snacks Kade brought and the combined snacks that Jaxon and Zane brought?
(A) 13
(B) 93
(C) 51
(D) 14
126. Individuals generally choose from five alternatives strongly agree, agree, uncertain, disagree and strongly disagree is example of ____ scale
(A) Semantic
(B) Nominal
(C) Likert
(D) Ratio scale
127. Describe the correlation in the graph shown.
(A) Weak Negative
(B) Weak Positive
(C) Strong Negative
(D) Strong Positive
128. How many students scored higher than 86?
(A) 3 students
(B) 12 students
(C) 9 students
(D) 10 students
129. Many professional schools require applicants to take a standardized test. Suppose that 1000 students take such a test. Several weeks after the test, Pete receives his score report: he got a 63, which placed him at the 73rd percentile. This means that
(A) Pete's score was below the median.
(B) Pete did worse than about 63% of the test takers.
(C) Pete did worse than about 73% of the test takers.
(D) Pete did better than about 73% of the test takers.

130. While doing a project for P. E. class, Ling researched the number of athletes competing in an international sporting event. How many countries have exactly 32 athletes?
- (A) 4
 - (B) 3
 - (C) 6
 - (D) 1
131. How many students sent more than 29 text messages?
- (A) 45
 - (B) 25
 - (C) 95
 - (D) 199
132. In Excel which of the following formulas is not entered correctly?
- (A) =10+50.
 - (B) =B7*B1.
 - (C) =B7+14.
 - (D) 10+50.
133. Jose travels several miles each day for his job. The dot plot shows the distances he traveled for one month. How many days did Jose travel 50, 55, or 60 miles?
- (A) 4
 - (B) 2
 - (C) 7
 - (D) 13
134. Which is NOT a formula?
- (A) B2+b3+b4
 - (B) =b1+b2+b3
 - (C) =b4*c4
 - (D) =b5/b7
135. Research to define degree of relationship between two variables
- (A) Conducting a survey
 - (B) Performing correlation research
 - (C) Creating a hypothesis
 - (D) Doing an experiment
136. Sum of mode and median of the data 12, 15, 11, 13, 18, 11, 13, 12, 13
- (A) 26
 - (B) 31
 - (C) 36
 - (D) 25
137. What is a Pivot Table in Excel?
- (A) A Pivot Table in Excel is a function used to convert text to numbers.
 - (B) A Pivot Table in Excel is a feature that allows you to send emails directly from the spreadsheet.
 - (C) A Pivot Table in Excel is a tool used to summarize and analyze data from a source table.
 - (D) A Pivot Table in Excel is a type of chart used to display data visually.
138. Which of the following statistics involves methods of organizing, picturing, and summarizing information from samples or populations?
- (A) Data Analysis
 - (B) Data Interpretation
 - (C) Data Coding
 - (D) Data Presentation
139. How many teachers are 20-25 years of age
- (A) 10
 - (B) 8
 - (C) 3
 - (D) 4
140. How many more inches of rain fell in April than June?
- (A) 2
 - (B) 6
 - (C) 10
 - (D) 14
141. The dot plot shows a random sample of the number of migrating geese flocks observed by 25 participants during a two-day hike. What is the median value of Day 1?
- (A) 4

- (B) 5
(C) 5.5
(D) 6
142. How many employees are there that make between \$33,000 and \$43,000
(A) 250
(B) 500
(C) 550
(D) 750
143. Which is the default method for summarizing data in a PivotTable?
(A) Count
(B) Average
(C) Max
(D) Sum
144. Brandon has already saved \$1,220 for college. He expects the total cost of his first year to be \$9,850, and expects to receive a scholarship for \$2,120. How much money should Brandon save each week in order to have enough money in 2 years to pay for his first year of college?
(A) \$62.60
(B) \$74.33
(C) \$103.37
(D) \$271.25
145. The following frequency graph shows the number of adult visitors and child visitors to a park. What fraction of all visitors were children that visited the park in April?
(A) $\frac{2}{5}$
(B) $\frac{2}{29}$
(C) $\frac{1}{7}$
(D) $\frac{2}{15}$
146. How many more mountain bikes were sold than road bikes?
(A) 22
(B) 28
(C) 16
(D) 6
147. Which appeal often uses statistical information?
(A) Ethos
(B) Pathos
(C) Logos
(D) None of above
148. There are 35 boys out for football. This is about 5% of the total enrollment. How many total kids are in the school?
(A) 30
(B) 700
(C) 350
(D) 1235
149. State the pattern of the number series below. 23 450, 23 460, 23 470, 23 480, 23 490
(A) Ascending order by thousands
(B) Ascending order by hundreds
(C) Ascending order by tens
(D) Ascending order by ones
150. Alonso's dog had a litter of puppies. Alonso weighed each puppy in pounds. He made this dot plot to show the data. Alonso placed the 3 lightest puppies and the heaviest puppy in a basket. What was the combined weight of the 4 puppies that were in the basket?
(A) 4 pounds
(B) 6 pounds
(C) 8 pounds
(D) 10 pounds
151. Jackson weighs 8 pounds less than he did last year.
(A) $N + 8$
(B) $8n$
(C) $N - 8$
(D) $8/n$
152. According to the graph, in the beginning of 2017, approximately how many daily users did Snapchat have?
(A) 50 million users
(B) 150 users
(C) 150 million users
(D) 100 users

153. Which of the following best summarizes the data in the graph?
- (A) The average wind speed increases steadily between 5:00 am and midnight.
 - (B) The average wind speed more than doubles from 18:00 to 22:00.
 - (C) The average wind speed is lowest between 3:00 and 5:00.
 - (D) The average wind speed is highest between 20:00 and 22:00.
154. Which statement best describes the relationship shown in this scatter plot?
- (A) Students with a bigger shoe size earn a higher math score
 - (B) Students with a smaller shoe size earn a higher math score
 - (C) A student's shoe size has no effect on their math score
 - (D) A student with a shoe size of 8 will always earn a score of 80%
155. The accuracy of data analysis depends on the accuracy of ___ in terms of their location and shape
- (A) Surveying Map
 - (B) Satellite Map
 - (C) Spatial features
 - (D) Scanners
156. This shows how many baseball cards a group of friends have in their collections. How many friends have baseball card collections with more than 70 cards?
- (A) 7
 - (B) 8
 - (C) 9
 - (D) 4
157. What correlation does literacy rate have with standard of living?
- (A) The higher the literacy rate the lower the standard of living
 - (B) The higher the literacy rate the higher the standard of living
 - (C) The lower the literacy rate the higher the standard of living
 - (D) None of above
158. Which comparison is NOT true?
- (A) $3.621 < 3.721$
 - (B) $4.123 > 4.12$
 - (C) $3.9 < 3.875$
 - (D) $4.222 < 4.23$
159. Classes in Year 2 and Year 5 were asked what their favourite drink was. How many children in Year 2 chose Rolla Cola?
- (A) 1
 - (B) 8
 - (C) $\frac{1}{6}$
 - (D) 24
160. A company expects to add hundreds of new jobs in the next few years. The company takes a survey of current employees to find out how many would like to work from home. Company managers will use this information to decide how much office space to rent for the next three years. This survey is an example of what?
- (A) Business analytics
 - (B) Data security
 - (C) Computer support
 - (D) Cloud computing
161. A randomly selected group of students were asked if they like cats or dogs. The results are shown in the Venn diagram. If a student was randomly selected, what is the probability they like cats or they like dogs?
- (A) 0.23
 - (B) 0.56
 - (C) 0.73
 - (D) 0.9
162. Carmen is school shopping and trying to decide which pack of pens to buy. She can buy 18 pens for \$6.84 or 30 pens for \$8.40. Which pack offers the better deal?
- (A) 18 pens for \$6.84
 - (B) 30 pens for \$8.40

- 163.** If I were going to do a speech that explained the layout of the new and improved 3 story, state-of-the-art Albany High School, which pattern might I choose?
- (A) Cause-effect pattern
 - (B) Spatial pattern
 - (C) Problem-solution pattern
 - (D) Climactic pattern
- 164.** An airline is a company that offers regular services for transporting passengers or goods via flight. The diagram shows the proportion of flights to different international regions for an airline. One region makes up about 60% of the airline's flights. Which region is it?
- (A) Europe
 - (B) North America
 - (C) Africa
 - (D) Asia
- 165.** How many students spent 8 hours on their homework?
- (A) 2
 - (B) 3
 - (C) 4
 - (D) 982,238,342
- 166.** There are 5 blue marbles, 4 red marbles, and 3 yellow marbles in a box. If Jim randomly selects a marble from the box, what is the probability of selecting a red or yellow marble?
- (A) $\frac{1}{4}$
 - (B) $\frac{1}{3}$
 - (C) $\frac{7}{12}$
 - (D) $\frac{3}{4}$
- 167.** About how many trees are greater than 300 cm in height?
- (A) 30
 - (B) 3
 - (C) 27
 - (D) 11
- 168.** A local home store has a lot of potted flowers they want to sell. They have display shelves that will hold 25 plants each. If they want to display all of the plants listed in the chart, how many display shelves would be needed?
- (A) 4
 - (B) 8
 - (C) 17
 - (D) 18
- 169.** Only 13 students were absent from school. This was 4% of the enrollment. What is the school's enrollment?
- (A) Part
 - (B) Whole
 - (C) Percent
 - (D) None of above
- 170.** A farmer counted the number of apples on each tree in her orchard. How many trees have at least 30 apples but fewer than 60 apples?
- (A) 2
 - (B) 4
 - (C) 0
 - (D) 3
- 171.** A store sells 3 types of fruit: apples at (2, 5), bananas at (4, 7), and cherries at (6, 3). Which fruit has the highest y-coordinate?
- (A) Bananas
 - (B) Grapes
 - (C) Cherries
 - (D) Apples
- 172.** Which of the following conclusions cannot be drawn from the graph above?
- (A) The two Americas account for a combined 29% of the world's landmass.
 - (B) Half of the earth's surface area is covered by Asia and Africa.
 - (C) The landmass of Africa is approximately the same size as the combined landmass of Antarctica, Europe, and Australia.
 - (D) Asia is approximately 50% larger, based on landmass, than Africa.

173. The average of lower and upper class limits is called
(A) Class Intervals
(B) Class marks
(C) Class boundaries
(D) Class limits
174. Crickets chirp to attract other crickets. The temperatures and rates of their chirping are graphed above. Which statement below is most likely true for the data represented in the graph?
(A) The cooler the temperature, the louder the crickets chirp
(B) The crickets cannot chirp at temperatures lower than 10 degrees C.
(C) The warmer the temperature, the more often crickets chirp.
(D) The temperature and the chirping of crickets are not related.
175. Which of the following can best help when determining how stringent a school's admission process is?
(A) Enrollment
(B) Student-to-teacher ratio
(C) Number of majors available
(D) Acceptance rate
176. Based on the graph, the plant grows best in what amount of sunlight?
(A) 1 hour of sunlight
(B) 3 hours of sunlight
(C) 6 hours of sunlight
(D) 9 hours of sunlight
177. Which age has the greatest frequency?
(A) 5
(B) 10
(C) 15
(D) 20
178. There were 28 reported crime of robberies, 162 reported crime of rape and 8 reported crime of libel in Navotas City. Give the Crime Volume in Navotas City
(A) 178
(B) 198
(C) 208
(D) 168
179. Which graph is proportional?
(A) A
(B) B
(C) C and D
(D) All of the graphs are proportional
180. Lacy and Gerald gave their heights for a school survey. Lacy's height is 51.25 inches. Gerald's height is 46.65 inches. How many inches taller is Lacy than Gerald?
(A) 4.6 inches
(B) 5.4 inches
(C) 15.4 inches
(D) 15.6 inches
181. How many students received a grade of 93, 94 or 95?
(A) 13
(B) 6
(C) 7
(D) 25
182. In the apartment 15 people have dogs, 12 people have cats and 7 people have a cat and a dog. How many people have just a cat?
(A) 5
(B) 12
(C) 7
(D) 15
183. Common purposes for data visualisations include:
(A) Educating, persuading, entertaining and informing
(B) Educating, performance and story telling
(C) Managing, educating, persuading and informing
(D) Educating, differential, learning and managing

184. If I tell you that you scored at the 55th percentile on your final exam, you would know:
(A) 55% of the class scored the same or worse than you did
(B) You earned a 55% on the exam
(C) You failed the exam
(D) 45% of the class scored worse than you did
185. The scientific method of gathering and analyzing market-related data is known as
(A) Production Research
(B) Advertising Research
(C) Marketing Research
(D) Sales Research
186. Apartments in the Riverdale Manor cost less than apartments in The Gaslight Commons. Apartments in the Livingston Gate cost more than apartments in the The Gaslight Commons. Of the three apartment buildings, the Livingston Gate costs the most. If the first two statements are true, the third statement is
(A) True
(B) False
(C) Uncertain
(D) None of above
187. How many scholarships were awarded in the last 5 years?
(A) 10000
(B) 20000
(C) 33497
(D) 40000
188. Chase ordered four numbers from greatest to least. Which correctly shows these numbers?
(A) $3.109 > 3.098 > 3.192 > 3.186$
(B) $3.098 > 3.109 > 3.186 > 3.192$
(C) $3.192 > 3.109 > 3.186 > 3.098$
(D) $3.192 > 3.186 > 3.109 > 3.098$
189. Which is often an effect of a high literacy rate?
(A) A higher illiteracy rate
(B) Lower education levels.
(C) A lower standard of living.
(D) A higher standard of living
190. The least amount of people at the bowling alley were in which age group below?
(A) 6-15
(B) 16-25
(C) 26-35
(D) 36-45
191. From the chart which animal gets the least amount of sleep during the day
(A) Brown Bats
(B) Giraffe
(C) Dog
(D) Cat
192. How many students received a score in the 90s?
(A) 6
(B) 2
(C) 91%
(D) 17
193. Bell ate $\frac{1}{4}$ of a pie. Susan ate $\frac{2}{8}$ of a pie. Who ate less pie?
(A) Bell
(B) Susan
(C) They ate the same amount.
(D) None of above
194. Your group's graph has five sun symbols for sunny days and three cloud symbols for cloudy days. What can you say about the weather that week?
(A) There were more sunny days than cloudy days
(B) There were equal sunny and cloudy days
(C) There were more cloudy days than sunny days
(D) There were no sunny or cloudy days
195. Find the Range of: 4, 7, 38
(A) 8

- (B) 34
(C) 11
(D) 3 to 8
- 196.** Base your response on the following data: 3, 5, 2, 5, 4, 7, 1, 0, 6, 4, 8, 5, 3, 2, 4, 5, 9. How many times were 6-8 goals scored?
(A) 1
(B) 2
(C) 3
(D) 4
- 197.** All of the following are types of mixed data analysis except ____
(A) Monodata-monoanalysis
(B) Multidata-mononanalysis
(C) Monodata-multianalysis
(D) Multidata-multianalysis
- 198.** Average temperature and precipitation combine to make
(A) Climate
(B) Weather
(C) Atmosphere
(D) None of above
- 199.** What does the x-axis of the chart represent?
(A) Type of indigestion powder
(B) Number of drops of remedy mixture
(C) Amount of acid
(D) Effectiveness of powder
- 200.** The intersection areas of rows and columns in spreadsheet are called
(A) Box.
(B) Cells.
(C) Line.
(D) None of the above.
- 201.** What is the Maximum/greatest data item on this plot?
(A) 49
(B) 58
(C) 50
(D) 19
- 202.** The usual weather
(A) Climate
(B) Global climate
(C) Global warming
(D) Hot
- 203.** When reading a chart, what should you look for first?
(A) The title and labels
(B) The colors used
(C) The font style
(D) The author's name
- 204.** A list of numbers that show a pattern
(A) Ordered Pairs
(B) Table
(C) 1, 5,-3, 15
(D) Sequence
- 205.** A chart shows the amount of water consumed by students in litres. If one student drank 2 litres and another drank 1.5 litres, how much did they drink together?
(A) 3.5 litres
(B) 3 litres
(C) 2.5 litres
(D) 4 litres
- 206.** How many kids have a height of 5'3-5'6?
(A) 5 kids
(B) 1 kid
(C) 3 kids
(D) 2 kids
- 207.** This plot represent the number of cookies eaten at a county fair. What was the greatest amount of cookies eaten?
(A) 97
(B) 100
(C) 10
(D) 96

208. How many students were greater than or equal to 60 inches tall?
(A) 21
(B) 11
(C) 17
(D) 6
209. Which symbol makes the comparison TRUE? $10,789,205 \text{ --- } 15,745,982$
(A) $<$
(B) $>$
(C) $=$
(D) None of above
210. Which interest model when graphed is linear?
(A) Simple Interest
(B) Compound Interest
211. What do you understand by formatting?
(A) Working in empty worksheet.
(B) Emptying a worksheet.
(C) Generally arranging data in worksheet.
(D) Deleting select data from worksheet.
212. Which statement(s) are correct based on this graph? Select all that apply)
(A) The most common number of defects per hour is 3.
(B) The most common number of defects per hour is 16.
(C) Most of the time there are at least 3 defects per hour.
(D) When Henry works, there are 12 defects per hour.
213. Which order is this? 43, 67, 84, 89, 98
(A) Descending order
(B) Ascending order
(C) None of the above
(D) None of above
214. Favorite ice creams are shown in the chart. How many students are there in Year-8?
(A) 12
(B) 14
(C) 20
(D) 16
215. Which is the best paraphrase for the subject in the graph?
(A) The number of overseas visitors to the coast
(B) The proportion of overseas visitors to the coast
(C) The amount of overseas visitors to the coast
(D) None of above
216. Which of the following would NOT be stored in a cell?
(A) Formula
(B) Text
(C) Number
(D) Chart
217. What type of association does this graph have?
(A) Positive
(B) Negative
(C) None
(D) All of the above
218. (IF [Age]>65, "Senior", "Adult") This expression is an example of:
(A) A conditional expression.
(B) Algebraic expression.
(C) Something that belongs in a Microsoft Excel book.
(D) A financial expression.
219. How many students scored between a 86 and a 90?
(A) 1
(B) 3
(C) 6
(D) 10

220. Mark bowled 7 games last weekend. His scores are: 155, 165, 138, 172, 127, 193, 142. What is the range of Mark's scores?
- (A) 193
 - (B) 66
 - (C) 127
 - (D) 172
221. Find the outlier of the set of data: 7, 8, 11, 7, 6, 15, 31, 11
- (A) 7
 - (B) 15
 - (C) 11
 - (D) 31
222. Savannah used a thermometer to record temperatures of -2.1 degrees and 3.2 degrees. Which temperature in degrees is less than both of the temperatures Savannah recorded?
- (A) -1.3
 - (B) 2.9
 - (C) -4.5
 - (D) 0
223. How many more students would need to like yellow or green to tie red and orange?
- (A) 8 students
 - (B) 5 students
 - (C) 3 students
 - (D) 4 students
224. Which month had the least rain?
- (A) January
 - (B) February
 - (C) March
 - (D) April
 - (E) June
225. According to the graph, what speed was recorded most frequently?
- (A) 50 miles per hour
 - (B) 55 miles per hour
 - (C) 80 miles per hour
 - (D) 25 miles per hour
226. What label is along the y-axis in this graph?
- (A) Copyright 2007
 - (B) Lines
 - (C) Age in Years
 - (D) Number of Teens
227. Find the number of passengers who waited for the bus for 15 min or less.
- (A) 6
 - (B) 10
 - (C) 20
 - (D) 24
228. At the end of this module, you should be able to plan data analysis using ____ and hypothesis testing (if appropriate).
- (A) Statistics
 - (B) Chemistry
 - (C) Literature
 - (D) Geography
229. In paragraph 4, Katie includes specific information from the Texas Commission on Environmental Quality in order to-
- (A) Add credibility to her argument that the amount of trash in landfills is a problem
 - (B) Show support for the activities sponsored by an environmental agency
 - (C) Evaluate the effectiveness of groups that want to reduce the amount of trash in landfills
 - (D) Give an example of how a government agency can help the environment
230. What does the Select Data option in Chart Design Tab allow you to do?
- (A) Apply preformatted styles
 - (B) Choose data to include or exclude
 - (C) Edit chart data
 - (D) Change chart type
231. It is the time for making sense of the data gathered by analyzing and interpreting them. It will be followed by the conclusion which must be aligned with the analysis and interpretation, and of course, with the objectives of the research.
- (A) CONCEPTUALIZATION PHASE

- (B) DESIGN PHASE
(C) EMPIRICAL PHASE
(D) ANALYTICAL PHASE
(E) DISSEMINATION PHASE
- 232.** What is the purpose of data visualization in data crunching?
(A) To create artistic representations
(B) To simplify complex data for better understanding
(C) To store data securely
(D) To enhance data collection methods
- 233.** The summary function that calculates the number of data values in a PivotTable report is ____
(A) Count
(B) Product
(C) Var
(D) Count Nums
- 234.** The graph shows the top selling food items from a local restaurant. The managers are comparing the type of food sold during different years. What conclusion could the managers make about the type of food sold?
(A) Fish and chips were the most popular food sold over time
(B) Pizza increased the most over time
(C) In 1980, hamburgers sold the most while pizza sold the least
(D) In 1990, pizza was sold the most while hamburgers were sold the least
- 235.** The box plots show the heights of people (in inches) in each city that were spotted in a supermarket. Which statement is best supported by the information in the box plots?
(A) The interquartile range for Nashville is slightly greater than the interquartile range for Dallas.
(B) There was at least one person in both stores who was 75 inches tall.
(C) The spreads (ranges) for both cities is the same.
(D) Nashville has a smaller center (median) than Dallas.
- 236.** Read the graph on the left. What is the total number of students who took the survey?
(A) 30 students
(B) 29 students
(C) 8 students
(D) 9 students
- 237.** The number of runners who ran 11-20 miles is ____ the number of runners who ran 31-40 miles
(A) More than
(B) Less than
(C) Equal to
(D) None of above
- 238.** Complete the table of equivalent ratios.

3	n	9	12	15	
2	4	6	8	10	

(A) 4
(B) 5
(C) 6
(D) 8
- 239.** About how many male math teachers were there in 2006?
(A) 15
(B) 30
(C) 35
(D) 45
- 240.** Look at the tally chart. How many students are in this science class?
(A) 15
(B) 17
(C) 20
(D) 22
- 241.** Identify the outlier (what number doesn't belong) for the given data? 23, 34, 27, 7, 30, 26, 28, 31, 34
(A) 7
(B) 23
(C) 31
(D) 34

242. Mike picked 106 oranges and Sara picked 121 oranges. Tim picked 139 lemons. How many oranges were picked in total?
- (A) 227 lemons
 - (B) 227 oranges
 - (C) 228 oranges
 - (D) 366 lemons
243. How many students were at least 60 inches tall?
- (A) 21
 - (B) 11
 - (C) 17
 - (D) 6
244. Classes in Year 2 and Year 5 were asked what their favourite drink was. What fraction of pupils in Year 5 chose Fizzeraid?
- (A) 4
 - (B) 50%
 - (C) $\frac{1}{2}$
 - (D) 96
245. The diagram shows some kid's favourite activities. How many people like singing?
- (A) 2
 - (B) 3
 - (C) 4
 - (D) 5
246. According to the graph, Stuart's driest month during 1997 was ____
- (A) December
 - (B) January
 - (C) February
 - (D) November
247. Ralph studies the behaviors, characteristics, and buying habits of his company's target markets. What is Ralph involved in?
- (A) Advertising research
 - (B) Market analysis
 - (C) Sales forecasting
 - (D) Product marketing
248. What is the first step to create a chart/graph?
- (A) Choose a chart
 - (B) Print
 - (C) Highlight the data
 - (D) Save
249. The dot plot below represents the number of dollars in allowance that students receive each week in Mrs. Jimenez's class. What is the median amount of allowance?
- (A) 5
 - (B) 6
 - (C) 7.5
 - (D) 8
250. Given the data below, what is midpoint of the class interval 36-40?
- (A) 36
 - (B) 37
 - (C) 38
 - (D) 40
251. When all the numbers between 0 and 100 in a range should be displayed in Red Color, apply
- (A) Use =if() function to format the required numbers red.
 - (B) Apply Conditional Formatting command on Format menu.
 - (C) Select the cells that contain number between 0 and 100 then click Red color on Text Color tool.
 - (D) All of above.
252. The change in one quantity which changes the other is called
- (A) Proportion
 - (B) Variation
 - (C) Interpolation
 - (D) Ratio
253. In a computer class, students take a typing test to determine their speed. Which statement does NOT represent the data set?
- (A) A total of 50 students can type from 0-59 words per minute.

- (B) The number of students who typed 45-59 wpm is equal to the number of students who typed 0-29.
- (C) The number of students who typed 30-44 wpm accounted for 28% of the students.
- (D) Less than 15% of the students type 0-14 words per minute.
- 254.** The x-axis shows
- (A) Time
- (B) Carbon dioxide concentration
- (C) Science
- (D) None of above
- 255.** The list shows the number of trees Parker planted in three years..He planted 521 trees the first year..He planted 387 trees the second year..He planted 438 trees in the third year. Parker wants to plant a total of 3,000 trees. How many more trees does Parker need to plant?
- (A) 1506
- (B) 1654
- (C) 764
- (D) 2494
- 256.** A local university researched the yearly amount of garbage collected in one particular neighborhood, Cedar Hills. Their results are displayed in the graph. By 2001, what was the yearly amount of garbage that Cedar Hills deposited?
- (A) 1,000 lbs
- (B) 2,000 lbs
- (C) 3,000 lbs
- (D) 900 lbs
- 257.** What does the graph tell you about the food EXCEPT?
- (A) Food got 40% of the monthly budget
- (B) Food is the main priority of the Filipino households.
- (C) Food is the less priority of the Filipino households.
- (D) Food got the highest budget among the expenses.
- 258.** The two box plots below show the data collected by the manufacturers on the lifespan of light bulbs, measured in thousands of hours. Which graph has the larger Inter Quartile Range?
- (A) Manufacturer A
- (B) Manufacturer B
- (C) Both have the same Inter Quartile Range
- (D) Cannot be determined
- 259.** Randy had \$150.00 to spend on school clothes. After buying 5 shirts he had \$82.50 left. Which is the price of each shirt he bought, not including tax?
- (A) \$13.00
- (B) \$13.50
- (C) \$15.50
- (D) \$30.00
- 260.** A group of students are on a class trip to Italy. 18 of them like penne, 12 like conchiglie, 14 like tagliatelle, 8 like penne and conchiglie, 4 like penne and tagliatelle, 6 like conchiglie and tagliatelle. Only 3 like all the types of pasta. How many students are on the trip, if everyone likes at least one of the types?
- (A) 23
- (B) 26
- (C) 29
- (D) This situation is impossible
- 261.** This plot represents the number of seashells found at the beach by a group of students on a field trip. What is the total amount of seashells found on the beach by the students?
- (A) 257
- (B) 527
- (C) 572
- (D) 752
- 262.** Raawi asks his classmates if they have brown hair or wear glasses. $B = \{\text{students with brown hair}\}$ and $G = \{\text{students with glasses}\}$. His results are shown in the Venn diagram. How many students have brown hair?
- (A) 13

- (B) 16
(C) 20
(D) 22
- 263.** Principal Wilkinson reported the state test scores from some students at his school. How many students scored at least 10 points but fewer than 40 points?
(A) 8
(B) 3
(C) 10
(D) 1
- 264.** Which of the following questions can be answered by reading a chart?
(A) What is the main character's motivation?
(B) What is the trend in sales over the last year?
(C) What is the theme of the story?
(D) What is the author's writing style?
- 265.** Steven kept track of weather conditions over one week. The following chart shows his data. Which statement describes the weather during the week?
(A) It was sunny on the warmest days of the week.
(B) The weather improved each day of the week.
(C) Most days of the week were very cloudy.
(D) It rained on the coldest day of the week.
- 266.** Choose the best sentence which is the same meaning with the previous one. The number of people owning mobile phones rose dramatically between 1990 and 1995.
(A) The number of people owning mobile phones went down dramatically between 1990 and 1995.
(B) There was a dramatic rise in the number of people buying mobile phones between 1990 and 1995.
(C) There was a dramatic rise in the number of people owning mobile phones between 1990 and 1995.
(D) None of above
- 267.** What do points A and E represent on the box plot?
(A) Mean and Mode
(B) Mean and Median
(C) Least and Greatest Value
(D) First and Third Quartiles
- 268.** Which region had the highest number of immigrants from 1970 to 2010?
(A) Europe
(B) Asia
(C) The Americas
(D) Africa
- 269.** If the weight of 4 friends Rahul, Gaurav, Rohan and Sohan are 25.421 kg, 25.741 kg, 25.690 kg and 25.030 kg respectively, who is the heaviest among all?
(A) Rahul
(B) Gaurav
(C) Rohan
(D) Sohan
- 270.** What is the difference between the number of frogs in the pond when the rainfall was 5cm and when the rainfall was 20cm?
(A) 20
(B) 40
(C) 50
(D) 60
- 271.** Student's performance is compared with other students in?
(A) Essay Type Test.
(B) Standardized Test.
(C) Objective type test.
(D) Norm referenced test.
- 272.** At right is a cumulative relative frequency graph for the 48 racers who finished the grueling 50km cross-country ski race at the 2014 Sochi Olympics. Approximately what proportion of the racers finished the race in MORE than 2.15 hours?
(A) 1.34

- (B) 0.45
(C) 0.238
(D) 0.54
- 273.** Data processing involves:
(A) Editing, coding, and tabulation of data
(B) Collecting raw data only
(C) Writing a report
(D) Hypothesis formulation
- 274.** Which set of numbers follows the same rule as the following pattern: 21, 24, 27, 30, 33, 36?
(A) 14, 16, 18, 20, 22
(B) 56, 60, 64, 68, 72, 76
(C) 73, 70, 67, 64, 61
(D) 47, 50, 53, 56, 59
- 275.** Mr. Figgins puts away 32 basketballs, 59 tennis balls, and 47 footballs. About how many balls did he put away?
(A) 120
(B) 130
(C) 140
(D) 150
- 276.** Look at the tally chart. How many items were sold altogether?
(A) 7
(B) 8
(C) 9
(D) 10
- 277.** List the ordered pairs
(A) Input and Output
(B) (0,12), (2,10), (4,8), (6,6)
(C) (12,0), (10,2), (8,4), (6,6)
(D) (6,6)
- 278.** How many people watched between 6 and 10 hours of TV last week?
(A) 31
(B) 22
(C) 15
(D) 35
- 279.** Most of the commonly used quantitative statistical models can only determine correlation, but not causation.
(A) Scope
(B) Delimitations
(C) Limitations
(D) None of above
- 280.** Who's the Richest? Four friends have all been saving money. Brad has more than Adam but not as much as George. Jenny has more than George. List in order of who has the least to the greatest.
(A) Adam, Jenny, George, Brad
(B) Jenny, Adam, George, Brad
(C) Adam, Brad, George, Jenny
(D) Jenny, George, Brad, Adam
- 281.** Which of the following graphs best illustrates the relationship between the heat released by the foods listed in Table 1 and the change in water temperature?
(A) A
(B) B
(C) C
(D) D
- 282.** Hot air balloon festivals draw large crowds of people. The attendance on the first day was 17,356. On the second day, the attendance was 19,000. How many more people attended the second day than the first day?
(A) 2,356 more people attended the 2nd day than the 1st day.
(B) 1,644 more people attended the 2nd day than the 1st day.
(C) 36,356 more people attended the 2nd day than the 1st day.
(D) 1,744 more people attended the 2nd day than the 1st day.
- 283.** The World Bank report by Wodon et al. (2018) argues that the benefits of education for girls are most significant at which level?
(A) Pre-primary education
(B) Vocational training post-primary

- (C) Primary education
 - (D) Secondary education
- 284.** How many more pizza slices did Pizza Italia sell than Antonio's Pizzeria?
- (A) 1,000
 - (B) 600
 - (C) 500
 - (D) 400
- 285.** According to the graph, what is the frequency of pet owners who have birds?
- (A) 2 people
 - (B) 3 people
 - (C) 4 people
 - (D) 6 people
 - (E) 8 people
- 286.** What fraction and decimal represent the shaded portion?
- (A) $65/100$ and 0.65
 - (B) $65/100$ and 0.065
 - (C) $63/100$ and 6.3
 - (D) $63/10$ and 0.63
- 287.** One unit on the vertical scale for the number of children includes how many children?
- (A) 10
 - (B) 5
 - (C) 2
 - (D) 20
 - (E) 1
- 288.** There can be multiple correct inferences about the same text.
- (A) True
 - (B) False
- 289.** If this chart represents a sample from a population of 1200 students, how many have Math as their favorite subject?
- (A) 192
 - (B) 504
 - (C) 19200
 - (D) 50400
- 290.** Which of the following is a function of spreadsheets?
- (A) Designing websites
 - (B) Analyzing data
 - (C) Writing letters
 - (D) Creating videos
- 291.** What type of correlation does this graph have?
- (A) Negative
 - (B) Positive
 - (C) None
 - (D) None of above
- 292.** Priya is analyzing the population distribution across different cities. She notices there are big variations between city populations and seeing fine differences is not so important. What type of chart should she use?
- (A) Bar-ordered
 - (B) Column-ordered
 - (C) Symbol-proportional-ordered
 - (D) Dot-plot-strip
- 293.** The number of minutes that band members practiced last night are shown in the stem and leaf plot. What is the difference between the least number of minutes a band member practiced and the greatest number of minutes a band member practiced?
- (A) 51
 - (B) 46
 - (C) 56
 - (D) 61
- 294.** How many more employees walked to work rather than cycled?
- (A) 14
 - (B) 8
 - (C) 10
 - (D) 12
- 295.** What is the following question asking you to find?"93% of what is 53?"
- (A) Percent

- (B) Part
(C) Whole
(D) Nothing
296. "Cities are hubs for ideas, commerce, culture, science, productivity, social development, and much more. At their best, cities have enabled people to advance socially and economically. However, many challenges exist to maintaining cities in a way ____" Which goal?
(A) Clean water and Sanitation
(B) Innovation and Infrastructure
(C) Life below water
(D) Sustainable Cities and Communities
297. What are the common techniques used for data presentation in quantitative research?
(A) Common techniques include tables, charts, graphs, and statistical measures like mean, median, and standard deviation.
(B) Writing a short story
(C) Creating a word cloud
(D) Using interpretive dance
298. In writing Task 1 Academic, you are asked to:
(A) Write a report on a chart (bar chart, line graph, pie chart, table, map, diagram/process)
(B) Write an essay sharing your opinion
(C) Write a letter, an email or a note
(D) Write a story
299. What information does this chart tell you?
(A) This graph tells me how much money people in Jamaica have.
(B) This graph tells me the average highest temperatures in Jamaica over a year.
(C) This graph tells me the temperature of the United States.
(D) This graph tells me how much money people in the United States have.
300. This plot show the ages of people at a birthday party. How many people at the party are 20 years of age or younger?
(A) 7
(B) 6
(C) 8
(D) 5
301. Dollar is equivalent to 52 pesos. Thus, my 100 dollars is equivalent to 5200 pesos.
(A) Arguments from Analogy
(B) Inductive Generalization
(C) Arguments from Authority
(D) Arguments based on Math
302. The double dot plots show the average wait times, in minutes, for two popular rides at an amusement park. Which ride typically has a longer wait time?
(A) No inference can be made from the graph.
(B) Topsy Turvy
(C) The wait times are the same for both rides.
(D) Rocket Blast
303. According to the graph, what kind of relationship is there between driver age and the ability to read signs?
(A) A positive relationship
(B) A negative relationship
(C) A quadratic relationship
(D) No relationship
304. From the data set: 3, 6, 9, 12, identify the pattern and predict the next number.
(A) 12
(B) 10
(C) 15
(D) 18
305. Dr. Li wants to understand whether mindfulness apps reduce anxiety. Instead of running her own experiment, she gathers results from 40 published studies, giving more weight to those with thousands of participants and rigorous methods. What research method is Dr. Li using?
(A) Literature review

- (B) Meta-analysis
 - (C) Case study
 - (D) Data analysis
 - (E) A survey study
- 306.** Coach Newman has been keeping a record of the temperature in his classroom in the chart above. What is the difference between the temperature at 8 am and the temperature at 1 pm?
- (A) 3 degrees
 - (B) 11 degrees
 - (C) 0 degrees
 - (D) 5 degrees
- 307.** If a dataset shows the following values: 5, 10, 15, 20, what is the total sum?
- (A) 55
 - (B) 50
 - (C) 60
 - (D) 45
- 308.** Although the general ranking of U.S education varies along many conditions, which education system does the U.S dominate completely worldwide?
- (A) Elementary
 - (B) Secondary education
 - (C) Postsecondary education
 - (D) K-12 education
- 309.** Based on the data, which of the following policies would most likely make the greatest reduction in the ecological footprint for all of the cities shown in the graph?
- (A) Setting higher fuel efficiency standards for vehicles
 - (B) Increasing the cost to use public transportation
 - (C) Offering tax incentives to individuals who recycle clothing and home goods
 - (D) Subsidizing the cost of solar panel installation for homeowners
- 310.** The high temperature was -7 degrees on Monday and -15 on Tuesday. On which day was it the warmest?
- (A) Monday
 - (B) Tuesday
- 311.** Which are pros of data visualization?
- (A) It can be accessed quickly by a wider audience
 - (B) It can misrepresent information
 - (C) It can be distracting
 - (D) None of the above
- 312.** The graph shows the number of birds in a bird sanctuary. Which statement is false?
- (A) There are more parrots than any other birds in the sanctuary.
 - (B) There are same amount of parrots as there are pigeons and ducks.
 - (C) More than half the birds in the sanctuary are either parrots or sparrows.
 - (D) More than half the birds are pigeons or sparrows.
- 313.** Hey, can you help me out here? I've got these numbers: 15, 20, 25, 30, and I'm trying to figure out what comes next. Any ideas?
- (A) 50
 - (B) 40
 - (C) 45
 - (D) 35
- 314.** Each dot represents 1 day. How many days were recorded?
- (A) 9
 - (B) 21
 - (C) 20
 - (D) 105
- 315.** Alice's belt rack contains 1 red, 3 black, 4 brown, and 2 blue belts. If she were to randomly select one belt from the rack, what is the probability that it would be black?
- (A) $\frac{3}{10}$
 - (B) $\frac{3}{7}$
 - (C) $\frac{3}{6}$
 - (D) $\frac{3}{4}$

316. When you make graph and picture in document, then your Computer holds the data in —
(A) Restore file.
(B) Backup drive.
(C) Clipboard.
(D) Memory.
317. Most of Canada is covered by forests. Which of the industries below benefit from the abundance of forests in Canada?
(A) Cattle raising
(B) Farming
(C) Logging
(D) None of above
318. Amy counted the number of pairs of shoes for sale at each of the shoe stores in the mall. How many stores have fewer than 100 pairs of shoes?
(A) 11
(B) 12
(C) 14
(D) 13
319. A chart is created that compares the number of units of Product A sold against the number of units of Product B sold for a three month period. Which data appears on the y-axis?
(A) Months
(B) Products
(C) Sales
(D) Units Sold
320. Where is the gap in the data?
(A) Between 23 and 25
(B) Between 17 and 20
(C) At 18
(D) At 22
321. Identify any outliers, gaps, or clusters.
(A) There are no outliers, gaps, or clusters
(B) Outlier at $x = 12$, no gaps, cluster at $x = 24$
(C) No outliers, gap between $x = 3$ and $x = 12$, cluster at $x = 18$
(D) There are no outliers, no gaps, cluster at $x = 9$
322. Is the graph proportional or non proportional?
(A) Proportional
(B) Non proportional
323. What fraction of the students chose Yellow as their favourite colour?
(A) $1/20$
(B) $1/5$
(C) $1/4$
(D) None of above
324. This dot plot shows the number of fillings that a group of children receive at their last dental appointment. How many children received two fillings?
(A) 4
(B) 2
(C) 3
(D) None of above
325. The graph below shows the number of sunny days and rainy days in a city during four months. Based on the information in the graph, which inference about the general weather days is valid?
(A) There are more rainy days in April than sunny days in March.
(B) There are more sunny days in May than any other month.
(C) There are more rainy days in March than any other month.
(D) There are more sunny days in June than all the other months combined.
326. How many more employees travelled by car than by bicycle to work?
(A) 4
(B) 2
(C) 10
(D) 12

327. How many babies weighed between nine and ten pounds at birth?
- (A) 8
 - (B) 16
 - (C) 22
 - (D) 5
328. This section of the report contains non-prose materials such as graphs and charts to present gathered data.
- (A) Main Body
 - (B) Conclusion
 - (C) Appendices
 - (D) Results
329. Using the graph which statement is correct
- (A) Student's favorite color is pink
 - (B) Student's favorite color is blue
 - (C) Student's favorite color is red
 - (D) Student's favorite color is green
330. Which specialization focuses on managing and organizing large volumes of data to extract valuable insights?
- (A) Mobile App Development
 - (B) Data Analytics
 - (C) Cloud Computing
 - (D) Virtual Reality
331. In Ms. Payne's class 10 students take music, 7 students take digital design and 2 take both. How many students take either music or digital design but not both?
- (A) 2
 - (B) 10
 - (C) 17
 - (D) 13
332. Kevin has 100 forms to complete and can finish 20 of them per hour. The number of forms(f) that Kevin still has to complete after h hours is represented by the following function. $f = 100 - 20h$ Darla has more forms to complete than Kevin and can complete more per hour. Which of the following functions could represent the number of forms (f) that Darla needs to complete after h hours?
- (A) $F = 100 - 15h$
 - (B) $F = 100 - 30h$
 - (C) $F = 150 - 15h$
 - (D) $F = 150 - 20h$
 - (E) $F = 150 - 30h$
333. Look at these numbers-11, 11, 7, 18, 8. What is the correct way to put them in order so you can find the median?
- (A) 18, 11, 11, 8, 7
 - (B) 11, 7, 8, 18, 11
 - (C) 8, 7, 11, 11, 18
 - (D) 7, 8, 11, 11, 18
334. How many students received a score in the 80's?
- (A) 2
 - (B) 10
 - (C) 14
 - (D) 27
335. Which statement best represents this relationship?
- (A) There is no relationship between the number of miles driven and the amount of gas remaining in the tank
 - (B) As the number of miles driven increases, the amount of gas remaining in the tank increases.
 - (C) As the number of miles driven increases, the amount of gas remaining in the tank decreases.
 - (D) A relationship cannot be determined from this scatter plot
336. What is evidence in argumentation?
- (A) Personal opinions or beliefs that support a claim or argument.
 - (B) Emotional appeals or anecdotes that support a claim or argument.
 - (C) Facts, data, or information that supports or proves a claim or argument.
 - (D) Unrelated information or irrelevant facts that support a claim or argument.

337. When Marketing Research can analyze present situation & the future trend it can be called as-
- (A) Decision making
 - (B) Explanation
 - (C) Descriptions
 - (D) Prediction
338. Nathan bowled 7 games last weekend. His scores are: 155, 165, 138, 172, 127, 193, 142. What is the range of Nathan's scores?
- (A) 193
 - (B) 127
 - (C) 60
 - (D) 66
339. Interest earned on both the initial principal and the interest reinvested from prior periods is called:
- (A) Free interest.
 - (B) Compound Interest.
 - (C) Simple interest.
 - (D) Interest on interest.
340. View by a reporter or editor that can cause a story to appear slanted in one way
- (A) Balance
 - (B) Beat
 - (C) Bias
 - (D) Backup
341. Students in Mr. Reed's classes recorded their favorite pet on the graph shown. How many students did not pick hamster as their favorite pet?
- (A) 6
 - (B) 54
 - (C) 40
 - (D) 94
342. Which data point on the graph is probably invalid?
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
343. What information could you get from this graph?
- (A) How much water is on Earth
 - (B) The percentage of the earth that is covered in water
 - (C) How land is available on earth
 - (D) How tall the highest mountain is
344. On how many days was the temperature less than 50 degrees?
- (A) 23 days
 - (B) 19 days
 - (C) 2 days
 - (D) 6 days
345. What evidence MOST strongly supports CARE Foundation's effectiveness?
- (A) Its partnership with 683 government schools
 - (B) The construction of 33 new schools
 - (C) The 400% enrollment increase and 10% dropout decrease
 - (D) Its focus on medicine, commerce and engineering scholarships
346. A chart shows that 5 students scored 80 cm in the long jump, while 3 students scored 90 cm. How many more centimeters did the students who scored 90 cm jump compared to those who scored 80 cm?
- (A) 20 cm
 - (B) 15 cm
 - (C) 10 cm
 - (D) 5 cm
347. A class of students count the number of sea stars they find on a field trip to the beach. They then make a pictograph that shows how many sea stars each student found. The key to the pictograph is shown that is 1 star picture = 5 sea stars. If the pictograph has 20 sea stars, how many total sea stars were found by the students?
- (A) 50
 - (B) 75
 - (C) 100
 - (D) 150

348. A pair of sunglasses is on sale for \$26. The original price of the sunglasses was \$40. What percent of the original price is the sale price?
- (A) 65%
(B) 60%
(C) 63%
(D) 67%
349. Which of the following is a systematic process of gathering information, interpreting information, and analyzing information to resolve a specific problem?
- (A) Credibility
(B) Inquiry
(C) Knowledge Production
(D) Research
350. A ___ is an arrangement of things that follows a rule.
- (A) Colour
(B) Object
(C) Pattern
(D) None of above
351. The pictograph shows the favourite musical instrument choose by a group of children. How many children choose pianica as their favourite musical instrument?
- (A) 4
(B) 10
(C) 20
(D) 40
352. How many books were sold in February and April?
- (A) 450
(B) 800
(C) 950
(D) 500
353. In how many games did the team score fewer than 10 points?
- (A) 3
(B) 5
(C) 4
(D) 6
354. Select the plot you could use to justify that the median is 4.
- (A) Box & Whisker
(B) Histogram
(C) Both
(D) Neither
355. On how many days was the temperature more than 49 degrees?
- (A) 23 days
(B) 19 days
(C) 2 days
(D) 6 days
356. What fraction of the monthly expenditure was spent on the rent? This question was discussed last week.
- (A) $\frac{1}{4}$
(B) $\frac{1}{3}$
(C) $\frac{1}{90}$
(D) $\frac{1}{25}$
357. A supermarket sells two different brands of eggs, Happy Hens and Sunny Side Up. Happy Hens eggs cost \$6.00 for 12 eggs. Sunny Side Up eggs cost \$1.50 for 5 eggs. Which brand sells its eggs at a cheaper price?
- (A) Sunny side up is cheaper by 20 cents per egg.
(B) Sunny side up is cheaper by 30 cents per egg.
(C) Happy Hens is cheaper by 20 cents per egg.
(D) Happy Hens is cheaper by 30 cents per egg.
358. The temperature in San Jose was 76 on Monday, 80 on Tuesday, and 100 on Wednesday. What is the median of the data?
- (A) 80
(B) 72
(C) 1
(D) None of above

359. Lily wants to know if there's a relationship between how much people earn and the number of children that they have.
- (A) Descriptive
 - (B) Correlational
 - (C) Experimental
 - (D) None of above
360. Which set of data matches this graph?
- (A) 2, 5, 8, 15, 26, 27, 36, 37, 38
 - (B) 2, 6, 9, 14, 26, 28, 35, 37, 38
 - (C) 2, 4, 7, 12, 24, 28, 34, 36, 38
 - (D) 3, 6, 8, 16, 26, 29, 35, 36, 37
361. The teacher asked the 30 students in her class when their birthday was and recorded the data in the circle graph. Which histogram represents the same data?
- (A)
 - (B)
 - (C)
 - (D)
362. A particular state has three professional basketball teams; Team A, B, & C. In the last season, 20% of the state went to see Team A play, 24% saw team B, and 28% saw Team C. Of these, 4% saw both A & B, 5% saw both A & C, and 6% saw both B & C. 1% saw all three teams play. Make a Venn diagram to answer the next 5 questions.
- (A) Click here when you have the diagram drawn
 - (B) DO NOT CLICK HERE or you will miss this!!!
363. What can be known or predicted from this chart?
- (A) The probable life expectancy in the US in 2007
 - (B) The probable population of the US in 2007
 - (C) The actual average lifespan of people born in 1980
 - (D) None of above
364. How many more individuals scored between 80-159 than from 0-79?
- (A) 8 people
 - (B) 14 people
 - (C) 12 people
 - (D) 5 people
365. Raffle tickets were sold for a school fundraiser to parents, teachers, and students. 563 tickets were sold to teachers. 888 more tickets were sold to students than to teachers. 904 tickets were sold to parents. Exactly, how many tickets were sold to parents, teachers, and students?
- (A) 2200
 - (B) 1451
 - (C) 2355
 - (D) 1792
 - (E) 2918
366. Which plot has more data points?
- (A) Top plot
 - (B) Bottom plot
 - (C) They have the same
 - (D) We can't tell from the plot

1.1.2 Data Fundamentals

1. Asher is conducting a research project for his statistics class. He needs to understand the concept of statistics to analyze the data he collects. What is the definition of statistics?
 - (A) Statistics is the process of making predictions without data.
 - (B) Statistics is the art of guessing outcomes.
 - (C) Statistics is the study of random events.
 - (D) Statistics is the science of collecting, analyzing, interpreting, and presenting data.
2. Identify the Level of Measurement described below: Classifies data into mutually exclusive (nonoverlapping), exhausting categories in which no order or ranking can be imposed on the data. This type of data commonly used for

- naming, classification and identification.
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ration
3. What is the least and greatest value of this data set?
- (A) 6 and 8
 - (B) 6 and 19
 - (C) 8 and 15
 - (D) 15 and 19
4. A relational database developer refers to a record as
- (A) Criteria
 - (B) A relation
 - (C) A tuple
 - (D) An attribute
5. What is a payload?
- (A) A small packet
 - (B) The actual data that is sent
 - (C) A small number of bytes
 - (D) A transmission rule
6. On which of the following percent profit or profit loss is calculated?
- (A) SP
 - (B) CP
 - (C) MP
 - (D) All of these
7. How do you group tally marks together?
- (A) By ones
 - (B) By twos
 - (C) By threes
 - (D) By fives
8. How many CDs do you own?
- (A) Continuous
 - (B) Discrete
9. A set of ordered pairs is one way to represent a ____
- (A) Domain
 - (B) Relation
 - (C) Range
 - (D) Variable
10. Express an integer: increase of 300
- (A) +300
 - (B) 3
 - (C) -300
 - (D) None of above
11. Data features refer to the ____
- (A) Type of data you want to collect.
 - (B) Set of data you want to collect.
 - (C) Source of data you want to collect.
 - (D) None of above
12. Based on the UNITS given, which of the following would be a correct answer for finding the SPEED.
- (A) $S = 4$ miles
 - (B) $S = 4$ minutes
 - (C) $S = 4$ min/miles
 - (D) $S = 4$ miles/min
13. All the information from all the fields about one person or object.
- (A) Record.
 - (B) Field.
 - (C) Primary Key.
 - (D) Relational database.
14. What does the 'I' in DIKW hierarchy stand for?
- (A) Intelligence
 - (B) Innovation
 - (C) Information
 - (D) Integration
15. Coping Strategies of all nursing students on flexible learning in RLE and Classroom is an example of
- (A) Experimental research

- (B) Quantitative descriptive non experimental
(C) Descriptive research
(D) Qualitative descriptive research
- 16. Employee Records**
(A) Machine generated data
(B) Human generated data
(C) Business generated data
(D) None of above
- 17. Which of the following is not a form of data?**
(A) Numbers and characters.
(B) Images.
(C) Sound.
(D) None of above.
- 18. Convert 3500% into a decimal number.**
(A) 35
(B) 3.5
(C) .35
(D) .035
- 19. A column in a database.**
(A) Field
(B) Record
(C) Entity
(D) Validation
- 20. Change 42% to a decimal**
(A) 42
(B) 4.2
(C) 0.42
(D) 4200
- 21. The aggregate of all elements, sharing some common set of characteristics, which comprise the universe for the purpose of the marketing research problem, is called the ____**
(A) Sample
(B) Inference
(C) Hypothesis
(D) Population
(E) Element aggregate
- 22. What is a the meaning for "median"?**
(A) Fair share
(B) Middle
(C) Repeats the most
(D) Variation
- 23. Would a report on the amount of rain that fell this morning be current or historical data?**
(A) Current
(B) Primary
(C) Historical
(D) Secondary
- 24. Adam earns \$10 for each car he washes.**
(A) Discrete
(B) Continuous
- 25. The process of examining the collected raw data to detect errors and omissions and to correct these is called**
(A) Analysis.
(B) Tabulation.
(C) Editing.
(D) Coding.
- 26. In a database about school form groups, you would need to create a different ____ for each year group**
(A) Table
(B) Record
(C) Field
(D) None of above
- 27. It holds elements, texts, numbers and formulas.**
(A) Cell
(B) Active Cell
(C) Rows
(D) Column
- 28. What is another word for "number"?**
(A) Dogit
(B) Digit
(C) Dugit
(D) Dagit

29. What is the primary purpose of data?
- (A) To store information
 - (B) To make decisions
 - (C) To Create Art
 - (D) To entertain people
30. What place do you use to compare 318,943 and 378,148?
- (A) Hundreds
 - (B) Tens
 - (C) Ones
 - (D) Ten Thousands
31. A portion of a population
- (A) Sampling
 - (B) Sample
 - (C) Strata
 - (D) Subject
32. The Georgia Department of Natural Resources Division of Wildlife caught and released 390 fish at Lake Allatoona. The DNR officers recorded 164 spotted bass, 110 large-mouth bass, and 116 striped bass. What type of research study
- (A) Experimental Research Study
 - (B) Observational Research Study
 - (C) All the above
 - (D) None of the above
33. Convert 8% into a decimal number.
- (A) .8
 - (B) 8
 - (C) .008
 - (D) .08
34. All of the y values of a relation are called what?
- (A) Domain
 - (B) Range
 - (C) Relation
 - (D) Function
35. Which stages of data analysis identifies what we want to find out?
- (A) Identify the need
 - (B) Define scope
 - (C) Identify potential sources
 - (D) Source and select information
36. Which set of numbers shows the rule "add 2" below?
- (A) 2, 6, 10, 14
 - (B) 13, 11, 9, 7
 - (C) 11, 13, 15, 17
 - (D) None of the above
37. The accuracy, reliability and consistency of data
- (A) Data integrity
 - (B) Data security
 - (C) Data archiving
 - (D) Data entry
38. Calculate the total number of students if 5 classes have 30 students each.
- (A) 180
 - (B) 150
 - (C) 120
 - (D) 200
39. In this group of numbers 785,063-785,306-785,630 The least number is:
- (A) 785,063
 - (B) 785,306
 - (C) 785,630
 - (D) None of above
40. It is a mechanism used for storing and distributing information.
- (A) Database management
 - (B) Data warehousing
 - (C) Retail Information System
 - (D) None of above
41. Which type of data is more time consuming to analyse?
- (A) Qualitative data
 - (B) Quantitative data

42. Calculate the median for the following set of scores: 45, 69, 69, 87, 88, 92, 99, 100
(A) 87
(B) 55
(C) 87.5
(D) 99
43. Change 37.5% into its decimal and fraction!
(A) 0.375 and $\frac{3}{5}$
(B) 37.5 and $\frac{7}{8}$
(C) 3.75 and $\frac{5}{12}$
(D) 0.375 and $\frac{3}{8}$
44. A row in a database.
(A) Record
(B) Field
(C) Entity
(D) Table
45. When you want to share your ideas it is useful to ____
(A) ____ use a lot of complicated words.
(B) ____ write as much as possible.
(C) ____ use a lot of facts and data.
(D) ____ make it as difficult as possible to read so people think you are smart.
46. Compare: 7.890 ____ 7.89
(A) >
(B) <
(C) =
(D) None of above
47. Indicate a suitable type of research design for the following research project: Research Project: "Consumer's preferences regarding the new Mageu health product in the Durban area"
(A) Qualitative-Exploratory
(B) Quantitative-Descriptive
(C) Quantitative-Causal
(D) None of above
48. The type of pets a person owns
(A) Qualitative Data
(B) Quantitative Data
49. A notation for defining the form and structure of data is known as
(A) Data description language.
(B) Binary language.
(C) Data channel.
(D) Data definition language.
50. Express an integer: a withdrawal of \$100
(A) 100
(B) -100
51. Microsoft Excel and Google Sheets are examples of:
(A) Presentation software
(B) Spreadsheet software
(C) Online workspace tools
(D) Web browsers
52. Bundling two values together into one can be considered as
(A) Single
(B) Pair
(C) Quadrat
(D) Triplet
53. It represents a numerical value that is a part of a whole.
(A) Fraction
(B) Arithmetic Sequence
(C) Algebra
(D) None of above
54. A unique identifying field.
(A) Primary Key
(B) Integer
(C) Verification
(D) Boolean
55. Spreadsheet rows are
(A) Numbers
(B) Letters
(C) Roman numbers
(D) Colors

56. An attribute (or attributes) that uniquely identifies each row in a relation is called a
(A) Column
(B) Forum field
(C) Primary key
(D) Duplicate key
57. Occurs when the same data element has different values.
(A) Data inconsistency
(B) Data integrity
(C) Data consistency
(D) Data credibility
58. It refers to the number of participants or observations included in the study.
(A) Representative
(B) Sample
(C) Sample Size
(D) Population
59. What is the primary task of a Database Administrator (DBA)?
(A) To write software instructions
(B) To manage data resources
(C) To design user interfaces
(D) To enter data into the database
60. The attribute refers to a ____ of a table
(A) Record
(B) Foreign key
(C) Primary key
(D) Field
61. Which Excel feature is used to arrange data in ascending or descending order?
(A) Filter
(B) Advance Filter
(C) Sorting
(D) Goal Seek
62. A column in a database table is called a ____
(A) Field.
(B) Row.
(C) Record.
(D) Entity.
63. A two-dimensional table of data sometimes is called a:
(A) Group
(B) Table
(C) Er diagram
(D) Relation
64. What is the median of the following data? 10, 10, 30, 70
(A) 10
(B) 20
(C) 25
(D) 30
65. Something that has an end and can be represented by a real number.
(A) Finite
(B) Infinite
(C) Simple interest formula
(D) Annual percentage rate (APR)
66. This is also known as an observational study,
(A) Qualitative methods
(B) Quantitative research
(C) Experimental Research
(D) Non-Experimental Research
67. Names of players on your school soccer team.
(A) Qualitative
(B) Quantitative
68. Arithmetic, geometric, or neither? 1, 3, 7, 13, ____
(A) Arithmetic
(B) Geometric
(C) Neither
(D) None of above
69. What is a unique identifier for a record in a table?
(A) Index key
(B) Foreign key
(C) Secondary key
(D) Primary key

70. What makes an argument a good argument?
- (A) If we yell at each other back and forth
 - (B) Having a strong claim
 - (C) Having good evidence, facts, or statistics
 - (D) None of above
71. Numbers on a wall clock
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
72. Elaine wants to measure the volume of a large pitcher of lemonade. Which units should Elaine use?
- (A) Meters
 - (B) Liters
 - (C) Degrees
 - (D) Grams
73. Which of the following is NOT a basic building block of a data model?
- (A) Entity
 - (B) Attribute
 - (C) Function
 - (D) Relationship
74. The set of all x-values
- (A) Range
 - (B) Constant
 - (C) Coefficient
 - (D) Domain
75. I store data in rows and columns. I am considered the basic building block of a relational database. I am used to organize information within a database.
- (A) Form.
 - (B) Table.
 - (C) Query.
 - (D) Report.
76. Used as a guide to perform calculations.
- (A) Formula
 - (B) Tables
 - (C) Equal sign
 - (D) Cells
77. A column name in a database is known as a —
- (A) Field
 - (B) Table
 - (C) Row
 - (D) Record
78. The set of all y-values
- (A) Range
 - (B) Constant
 - (C) Coefficient
 - (D) Domain
79. TRUE OR FALSE: A reliable, consistent measurement does not always mean that it is measuring something correctly
- (A) FALSE
 - (B) TRUE
80. A student codes gender as Male = 1, Female = 0. What is this process called?
- (A) Tabulation
 - (B) Organizing
 - (C) Cleaning
 - (D) Coding
81. Any person, object, practice, or process that is observed for research purposes
- (A) Face Validity
 - (B) Research Analysis
 - (C) Research Design
 - (D) Research Subject
82. Which of the below are the types of data?
- (A) Quality and quantity, tertiary and secondary
 - (B) Questionnaires and interviews
 - (C) Individuals and groups
 - (D) Primary, secondary, qualitative and quantitative

83. Part of a whole object, set, or unit
(A) Reciprocal
(B) Composite
(C) Fraction
(D) Mixed
84. What is data in research?
(A) Theoretical framework
(B) Final conclusion
(C) Raw facts and figures collected for analysis
(D) Abstract concepts
85. Which is the best description of a database?
(A) Stores data
(B) Stores data in a organised structure
(C) Stores data in an organised and logical structure
(D) None of above
86. The set of outputs in a relation
(A) Domain
(B) Dependent Variable
(C) Ordered Pairs
(D) Range
87. Returns the number of cells in a range that contain any value/label
(A) Count
(B) CountA
(C) CountIf
(D) List
88. A positive or negative whole number or zero.
(A) Rational number
(B) Integer
(C) Whole number
(D) None of above
89. The available body of supporting, valid, and relevant details, facts, or information that supports an inference, idea, or proposition
(A) Text Structure
(B) Argument
(C) Rebuttal
(D) Evidence
90. Quantify any objects, aspects or phenomena using certain standard and tools is called ____
(A) Evaluation
(B) Learning
(C) Measurement
(D) None of above
91. The following are components of a database except ____
(A) Reports.
(B) Metadata.
(C) User data.
(D) All the above.
92. ____ are the raw materials collected, processed and studied in the undertaking of research. They are the evidential basis that substantiates published research findings.
(A) Conclusion
(B) Assignment
(C) Findings
(D) Research Data
93. In 1870, there were roughly ____ active colleges.
(A) 1000
(B) 1500
(C) 2000
(D) 500
94. What do you call a collection of fields?
(A) File.
(B) Record.
(C) Database.
(D) Document.
95. Most database management systems allow you to have more than one key so that you can sort records in different ways. One of the keys is designated the ____ and must hold a unique value for each record.
(A) Prime attribute.
(B) Index key.
(C) Primary key.
(D) None of these.

96. An attribute in database is also known as
(A) Tuple.
(B) Relation.
(C) Row.
(D) Field.
97. Information/ concrete details that directly relate to your research are known as ____
(A) Reliable
(B) Good details
(C) Research
(D) Relevant
98. A six-digit card field used for postal ZIP codes is defined as
(A) A letter field.
(B) An alphabetic field.
(C) A numeric field.
(D) An alphanumeric field.
99. Is the following statement TRUE or FALSE? There are a lot of graphs and charts on the website; with all this information and data, the website must be trustworthy.
(A) TRUE
(B) FALSE
100. What operation do we use when finding the percentage of a given quantity?
(A) ADDITION
(B) SUBTRACTION
(C) MULTIPLICATION
(D) DIVISION
101. If the minimum value in a set is 12 and its range is 8, what is its maximum value?
(A) 4
(B) 8
(C) 12
(D) 20
102. Which of the following is NOT a stage in the data lifecycle?
(A) Data Acquisition
(B) Data Processing
(C) Data Reduction
(D) Data Storage
103. Charlotte and Tina are lab partners assigned to research who is friendlier, girls or boys. After conversing with their first 10 participants, they find that their friendliness ratings often differ. With which of the following should they be most concerned?
(A) Reliability
(B) Confounding variables
(C) Ethics
(D) Validity
104. Statistics is used by
(A) Government
(B) Businessmen
(C) Economists
(D) All the above
105. Choose true or false to the following definition: Initial data management consists of organizing the data, transcribing interviews and typing field notes, making the decision to analyze the data by hand or by computer
(A) True
(B) False
106. Focusing on describing or explaining data versus going beyond immediate data and making inferences is the difference between
(A) Central tendency and common tendency
(B) Mutually exclusive and mutually exhaustive properties
(C) Descriptive and inferential
(D) Positive skew and negative skew
107. This research focuses on the analysis of a phenomenon in its natural context.
(A) Qualitative research,
(B) Quantitative research
(C) Experimental Research
(D) Non-Experimental Research

108. — consist of information coming from observations, counts, measurements, or responses.
- (A) Statistics
 - (B) Data
 - (C) Population
 - (D) Sample
109. A step by step process that should be comprehensively explained by the researcher
- (A) Data analysis
 - (B) Research ethics
 - (C) Data collection
 - (D) Research instruments
110. Database tables contain COLUMNS that represent — and ROWS that represent —
- (A) Records, Variables
 - (B) Variables, Records
 - (C) None of the above
 - (D) All of the above
111. Identify the Level of Measurement described below: Classifies data into categories that can be ranked; however, precise differences between the ranks does not exist
- (A) Nominal
 - (B) Ordinal
 - (C) Ratio
 - (D) Interval
112. X-Values in a relation.
- (A) Function
 - (B) Range
 - (C) Inverse
 - (D) Domain
113. The color of marbles in a jar
- (A) Qualitative Data
 - (B) Quantitative Data
114. Which of the following is not an example of a value?
- (A) 350.
 - (B) May 10, 2001.
 - (C) 0.57.
 - (D) Serial Number 50771.
115. Describes the value of a digit
- (A) Hundreds
 - (B) Numbers
 - (C) Place value
 - (D) Digits
116. Which list contains all rational numbers?
- (A) $\sqrt{25}$ 6^2 $\frac{1}{4}$ 0.2525252525 —
 - (B) $\sqrt{36}$ π $\frac{2}{3}$ 0.3333333 —
 - (C) $\frac{4}{5}$ 3,250 $-6\sqrt{122}$
 - (D) $-3,025$ $3\sqrt{49}$ $\sqrt{47}$
117. What is a data warehouse?
- (A) A data warehouse is a physical storage facility for office supplies.
 - (B) A data warehouse is a term used to describe a building where data is manufactured.
 - (C) A data warehouse is a centralized repository that stores structured and unstructured data from various sources.
 - (D) A data warehouse is a type of software used for video editing.
118. The temperature in San Jose was 86 on Monday, 83 on Tuesday, and 68 on Wed, What is the Range of the data?
- (A) 18
 - (B) 22
 - (C) 222
 - (D) None of above
119. Change 6.5% to a decimal
- (A) .65
 - (B) 6.5
 - (C) .065
 - (D) .065%
120. What is the part of a database that only holds 1 type of information?
- (A) Field.
 - (B) Record.
 - (C) Table.
 - (D) Query.

121. Which is the set of all y-values or the outputs?
(A) Domain
(B) Range
(C) Relation
(D) Function
122. An Excel file is generally called a / an:
(A) E-Spreadsheet
(B) Worksheet
(C) Workbook
(D) Sheet
123. Inference Riddle: I am 1 trip around the sun, 12 months, 52 weeks and 365 days. You use me to measure your age.
(A) I am a month.
(B) I am a number.
(C) I am a day.
(D) I am a year.
124. During a research conference, Divya presented her findings on the significance of hypotheses in her study. She explained that the ___ objectives aim to highlight the importance of these hypotheses in understanding the research topic.
(A) Quantitative
(B) Qualitative
125. If you check your watch to see what time it is now, is that current or historical data?
(A) Current
(B) History
(C) Future
(D) Quantitative
126. Can be measured in meters (m)
(A) Distance
(B) Time
(C) Speed
(D) Acceleration
127. The smallest unit of information about a record in a database is called a ___
(A) Field.
(B) Cell.
(C) None of the Above.
(D) All the above.
128. It is used to assign numerals to objects or constructs according to rules so that numbers have quantitative meaning.
(A) Assessment
(B) Measurement
(C) Evaluation
(D) Testing
129. What time students have math class every-day
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
130. The numerical description that describe sample may be expected to differ from those that describe population because of random fluctuations inherent in sampling process.
(A) Probability sampling.
(B) Sampling design.
(C) Sampling error.
(D) Non-probability sampling.
131. Integer
(A) A computer stops functioning normally and will not respond to other parts of the system-it appears to freeze.
(B) Optical storage device that uses concentric tracks (rather than single spiral as used with normal CD and DVD) to record data. It can be written to and read from many times.
(C) A whole number with no decimal places (e.g. 18, 107).
(D) Complementary metal oxide semiconductor.
132. Which of the following is not a contrast between quantitative and qualitative research
(A) Distance vs. proximity of researcher to participants

- (B) Generalization vs. contextual understanding
(C) Hard, reliable data vs. rich, deep data
(D) Interpretivist vs. feminist
- 133.** The SQL command to choose which tables the data for the query will be taken from
(A) SELECT.
(B) WHERE.
(C) FROM.
(D) SHOW.
- 134.** Convert 60% to a decimal.
(A) 0.06
(B) 0.60
(C) 0.50
(D) None of above
- 135.** Which of these is a statistical question?
(A) What is your name?
(B) What is your address?
(C) Did you read today's newspaper?
(D) How old are the students in your class?
- 136.** It is the science of collecting, organising, analysing and interpreting data in order to make decisions.
(A) Data
(B) Statistics
(C) Variable
(D) Population
- 137.** Each of the 22 students in English class wrote 16 compositions by the end of the year. How many compositions did the English class write?
(A) 38
(B) 352
(C) 372
(D) 242
- 138.** The set of all possible input values in a relation
(A) Domain
(B) Range
(C) Function
(D) Correlation
- 139.** "The distance a number is from zero on a number line" is defined as:
(A) Integer
(B) Negative
(C) Operation
(D) Absolute value
- 140.** Which data type is used to store:99.10
(A) Integer.
(B) Real/Float.
(C) String.
(D) Boolean.
- 141.** What validation type checks a certain number of characters have been entered?
(A) Length check.
(B) Format check.
(C) Range check.
(D) Presence check.
- 142.** This research looks into a large group of people with different characteristics.
(A) Sequential
(B) Descriptive
(C) Causal
(D) Cross-sectional
- 143.** In a business meeting, how would you best describe the term 'information'?
(A) Raw facts and figures presented in the meeting
(B) Data that has been organized and presented in a report
(C) Data that is unorganized and scattered in different documents
(D) Messages sent through technology during the meeting
- 144.** The data that cannot be measured is:
(A) Continuous
(B) Nominal
(C) Ratio
(D) Interval

- 145.** This refers to the process of determining or describing the attributes or characteristics of physical objects generally in terms of quantity. Example is finding the area of a rectangular piece of paper.
- (A) Measurement
 - (B) Evaluation
 - (C) Assessment
 - (D) Test
- 146.** A vertical set of cells.
- (A) Column
 - (B) Row
 - (C) Table
 - (D) Worksheet
- 147.** A box that holds data
- (A) Spreadsheet
 - (B) Cell
 - (C) Row
 - (D) Data
- 148.** All of the x values of a relation are called what?
- (A) Domain
 - (B) Range
 - (C) Relation
 - (D) Function
- 149.** Jeff has four grades in Science. If his scores are 100, 96, 96, and 100, what is his average?
- (A) 96
 - (B) 97
 - (C) 98
 - (D) 100
- 150.** Double check the numbers to make sure they're ____
- (A) Continuous
 - (B) Accurate
 - (C) Summary
 - (D) Complex
- 151.** ____ is the science of collecting, organizing, analyzing, and interpreting data in order to make decisions.
- (A) Statistics
 - (B) Data
 - (C) Population
 - (D) Sample
- 152.** Why is data preparation important?
- (A) To ensure data quality and accuracy
 - (B) To collect data
 - (C) To present data
 - (D) To write conclusions
- 153.** Tara conducted a study on the effects of social media on teenagers. She found that the data from her research could be analyzed quantitatively and qualitatively. What type of research did Tara conduct?
- (A) Applied
 - (B) Empirical
- 154.** It is an element of database that is an association between entities and is represented using a common field in a set of records.
- (A) Entity
 - (B) Attribute
 - (C) Relationship
 - (D) Tables
- 155.** A Relational database is a collection of
- (A) Tables
 - (B) Cubes
 - (C) Attributes
 - (D) Values
- 156.** When data changes in multiple lists and all lists are not updated, this causes
- (A) Data redundancy.
 - (B) Information overload.
 - (C) Duplicate data.
 - (D) Data inconsistency.
- 157.** What kind of sequence? -29, -34, -39, -44, ____
- (A) Arithmetic
 - (B) Geometric

158. The number of parts the whole is divided into is the
(A) Numerator
(B) Denominator
159. What values can't repeat for a relation to be a function?
(A) X-values (domain)
(B) Y-values (range)
(C) Both x and y
(D) None of above
160. Totality of all values (or measurements) of a particular characteristic for a specified group of objects that are of interest to the researcher.
(A) SAMPLE
(B) POPULATION
(C) SAMPLING
(D) UNIVERSE
161. Where in the Venn diagram would you place 22?
(A) Natural numbers
(B) Whole numbers
(C) Integers
(D) Rational numbers
162. Joe is 6 foot 2.
(A) Qualitative
(B) Quantitative
163. The findings from a study of young single mothers at a university can be generalised to the population of:
(A) All young single mothers at that university
(B) All young single mothers in that society
(C) All single mothers in all universities
(D) All young women in that university
164. A category describing database items (the headings in tables).
(A) Field.
(B) Primary Key.
(C) Relational database.
(D) Flat-file database.
165. A — is a request for specific data from the database.
(A) Capture.
(B) Report.
(C) Form.
(D) Query.
166. Which of the following is NOT a component of a spreadsheet?
(A) Row
(B) Column
(C) Page
(D) Cell
167. A branch of science which deals with the collection, organization, presentation, analysis, and interpretation of data
(A) Geometry
(B) Statistics
(C) Biology
(D) Chemistry
168. Which level of measurement does not provide a numerical result for each participant.
(A) Nominal data
(B) Ordinal data
(C) Interval data
(D) None of above
169. Which database field type would be used to store a customer's name?
(A) Text.
(B) Numeric.
(C) Date/Time.
(D) Object.
170. Which set is finite?
(A) $\{x | x \text{ is an even prime number}\}$
(B) $\{x | x \text{ is a fraction between 15 and 16}\}$
(C) $\{x | x \text{ is an odd prime number}\}$
(D) $\{x | x \text{ is a prime number}\}$

171. "Data must be complete, unique, valid, timely, and consistent in order to be useful for decision making." This sentence shows the characteristic of?
- (A) Data Quality
 - (B) Structured Data
 - (C) Data Security
 - (D) Master Data
172. The table provides information on a system for coding letters of the alphabet as digital signals using strings of zeros and ones. What is the smallest length of a string of ones and zeros needed to code for all 26 letters of the alphabet?
- (A) 2
 - (B) 5
 - (C) 13
 - (D) 26
173. We have three Nissan GTRs, two Jeep Rubicons, and three Ferraris. Therefore, we own eight luxury cars.
- (A) Arguments from Authority
 - (B) Causal Inference
 - (C) Arguments based on Math
 - (D) Arguments from Analogy
174. If a distribution is skewed to the right with no outliers,
- (A) Mean < median
 - (B) Mean > median
 - (C) Mean = median
 - (D) Can not determine
175. Statistics is defined in terms of numerical data in the ____
- (A) Singular sense
 - (B) Plural sense
 - (C) Either a or b
 - (D) Both a and b
176. Which statement is NOT true in the equation $y=9x$?
- (A) The value of y is nine times the value of x
 - (B) The equation represents an additive relationship
 - (C) The value of y is 76.5 when the value of x is 8.5
 - (D) The equation represents a multiplicative relationship
177. A labeled element of a tuple, e.g. "Address" or "Date of birth" that describes a particular database entity is called
- (A) Row
 - (B) Tuple
 - (C) Attribute
 - (D) Record
178. As part of a visit, a veterinarian weighs each dog brought to her clinic. At the end of each day, she records each dog's weight. The weights of the dogs brought to her clinic on Tuesday are shown in the table. What unit is the attribute (data) is being measured in?
- (A) Grams
 - (B) Inches
 - (C) Pounds
 - (D) Feet
179. In Excel this type of software is similar to an accountant's worksheet
- (A) Word processing.
 - (B) Database.
 - (C) Spreadsheets.
 - (D) Graphics.
180. What is a record defined as?
- (A) A collection of keys in a database.
 - (B) A collection of Databases.
 - (C) A collection of fields in a predefined format.
 - (D) None of the above.
181. Databases are made up of one or more ____
- (A) Tables.
 - (B) Files.
 - (C) File types.
 - (D) Spreadsheets.

- 182.** A company wants to calculate staff wages. The most appropriate type of software to use is a:
- (A) Presentation package
 - (B) Word processor
 - (C) Control package
 - (D) Spreadsheet
- 183.** Which technical skill refers to a data scientist's ability to manipulate any form of data?
- (A) Data Analysis
 - (B) Data Manipulation and Processing
 - (C) Data Structure
 - (D) Data Matrix
- 184.** It is an element of database that is represented as a field in a database record and is a property of an entity.
- (A) Entity
 - (B) Attribute
 - (C) Relationship
 - (D) Tables
- 185.** ____ software is a type of application software that allows users to create, access, and manage a database.
- (A) Basis.
 - (B) Text management.
 - (C) Database.
 - (D) Content management.
- 186.** What is the term for 'the process of transmitting a continuous flow of data, typically via data processing software'?
- (A) Data Stream
 - (B) Variety
 - (C) Velocity
 - (D) Veracity
- 187.** The point or dot used to separate the whole from the fractional part of a number
- (A) Decimal
 - (B) Fraction
- 188.** Sending data from one place to another, by physical or electronic means is
- (A) E-mail.
 - (B) Internet.
 - (C) Data transmission.
 - (D) Distributed processing.
- 189.** All individuals/ objects w/ common characteristics.
- (A) Sample
 - (B) Population
 - (C) Variable
 - (D) Research Group
- 190.** Review: This is the only Level of Measurement where you can talk about differences between data points and have negative numbers:
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
- 191.** Study involves looking at data from a population at one specific point in time ____ This method is often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation.
- (A) Attrition rate
 - (B) Cross-sectional
 - (C) Longitudinal
 - (D) Control group
 - (E) Treatment group
- 192.** The scope will have to be narrowed down to a certain section of the ____
- (A) Target population
 - (B) Sample population
 - (C) Population
 - (D) None of above
- 193.** How we calculate profit?
- (A) Profit = SP-CP
 - (B) Profit = CP-SP

194. The time to compete a 1000 m race.
(A) Discrete data
(B) Continuous data
195. Y-Values in a relation.
(A) Function
(B) Range
(C) Inverse
(D) Domain
196. Truthfulness and accuracy of data gathered using qualitative methods.
(A) Qualitative data
(B) Validity
(C) Representativeness
(D) Generalisability
197. I want to store the name, address and telephone number of all my friends. What should I use?
(A) Database.
(B) Graphics Program.
(C) Web Browser.
(D) Word Processor.
198. The complete picture of data stored in database is known as
(A) Record.
(B) Schema.
(C) System flowchart.
(D) DBMS.

1.1.3 Qualitative Data

1. Social security number
(A) Qualitative
(B) Quantitative
2. A buoy is a floating platform that is often used to hold weather data collection instruments. The camera on the buoy that transmits video of the sky would be an example of ____
(A) Qualitative observations.
(B) Quantitative observations.
3. What characterizes "In Vivo Coding" in qualitative data analysis?
(A) Use of statistical codes
(B) Participants' own words as codes
(C) Computer-generated coding
(D) None of above
4. There is a bad odor coming from the test tube.
(A) Qualitative
(B) Quantitative
(C) Both
(D) Neither
5. It is light green in color.
(A) Qualitative
(B) Quantitative
6. Student identification numbers.
(A) Qualitative
(B) Quantitative
7. The basketball player has the number 11 on their jersey.
(A) Quantitative
(B) Qualitative
8. Which of the following is a categorical feature?
(A) Height of a person
(B) Price of petroleum
(C) Mother tongue of a person
(D) Amount of rainfall in a day
9. Data associated with a more humanistic approach to geography
(A) Interview.
(B) Observation.
(C) Qualitative Data.
(D) Questionnaire.
10. Quantitative or Qualitative: The flower had several white petals.
(A) Quantitative
(B) Qualitative

11. Genre of music students prefer
 - (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
12. The teachers are wearing red and black.
 - (A) Qualitative
 - (B) Quantitative
13. Classify the observation as qualitative or quantitative: darker
 - (A) Qualitative
 - (B) Quantitative
14. Data Presentation: Narrative Form
 - (A) Quantitative
 - (B) Qualitative
15. In qualitative research, what is the term for the process of systematically organizing and summarizing data?
 - (A) Content analysis
 - (B) Grounded theory
 - (C) Phenomenology
 - (D) Data coding
16. There are large puddles on the sidewalk.
 - (A) Qualitative
 - (B) Quantitative
17. Determine the type of data: favourite ice cream flavour on campus
 - (A) Qualitative Data
 - (B) Discrete Data
 - (C) Continuous Data
 - (D) None of above
18. Identify what type of Qualitative Research is the topic: Mangyan Courtship Dance: A Lost Tradition
 - (A) Biography
 - (B) Phenomenological
 - (C) Grounded Theory
 - (D) Ethnography
 - (E) Case Study
19. Classification of organisms
 - (A) Qualitative data
 - (B) Quantitative data
20. Observations in qualitative data analysis involve detailing behavioral patterns within an observation group, such as the amount of time spent in an activity.
 - (A) True
 - (B) False
21. The stove is red hot.
 - (A) Qualitative
 - (B) Quantitative
22. Coding is mainly used in:
 - (A) Qualitative data analysis
 - (B) Experimental analysis
 - (C) Numerical statistics
 - (D) Survey design
23. A researcher is observing a sunflower in a field. He notes that the center of the sunflower is yellow and fuzzy.
 - (A) Qualitative data
 - (B) Quantitative data
24. Jessica is wearing a scarf.
 - (A) Qualitative
 - (B) Quantitative
25. Quantitative or Qualitative: My favorite class is science.
 - (A) Quantitative
 - (B) Qualitative
26. The texture of different kinds of fabrics.
 - (A) Qualitative
 - (B) Quantitative
27. It tastes sweet.
 - (A) Qualitative
 - (B) Quantitative

28. The type of sports at the Olympics
(A) Qualitative Data
(B) Quantitative Data
29. A researcher explored the daily lives of street vendors. Which type of qualitative research is most appropriate?
(A) Case Study
(B) Narrative Research
(C) Ethnography
(D) Historical Research
30. The dogs were small.
(A) Qualitative
(B) Quantitative
31. What type of data describes non-numeric characteristics, such as colors or brand names?
(A) Ratio data
(B) Interval data
(C) Nominal data
(D) Ordinal data
32. Corvettes come in red, blue, and silver.
(A) Inference
(B) Quantitative
(C) Qualitative
(D) None of above
33. The birds were young.
(A) Qualitative
(B) Quantitative
34. What type of data would the results of a survey asking participants to choose their favorite color from a list represent?
(A) Continuous data
(B) Discrete data
(C) Qualitative data
(D) Quantitative data
35. The laptop is pink.
(A) Qualitative Data
(B) Quantitative Data
36. Which color scale is best for categorical data?
(A) Sequential
(B) Diverging
(C) Qualitative
(D) Logarithmic
37. What kind of data is shown in this example? The flowers have a strong scent and are red.
(A) Qualitative Data
(B) Quantitative Data
38. The barn contains pigs, cows, and horses.
(A) Qualitative
(B) Quantitative
(C) Both
(D) Neither
39. Detailed, thick description; inquiry in depth; direct quotations capturing people's personal perspectives and experiences.
(A) Qualitative data
(B) Holistic perspective
(C) Inductive analysis
(D) Naturalistic inquiry
40. What type of data would the results of a survey asking participants to rate their satisfaction as 'satisfied', 'neutral', or 'dissatisfied' represent?
(A) Continuous data
(B) Discrete data
(C) Qualitative data
(D) Quantitative data
41. Your favourite chocolate bar
(A) Qualitative
(B) Quantitative
(C) Continuous
(D) Discrete
42. Identify if the data point listed below is an example of qualitative data or quantitative data: blue-green gem
(A) Qualitative data
(B) Quantitative data

43. Color of beach tags on 7th street beach
(A) Qualitative
(B) Quantitative
44. Indicate a suitable type of research design for the following research project: Research Project: "What kind of emotions and attitudes motivate individuals to take part in mass events?"
(A) Qualitative-Exploratory
(B) Quantitative-Descriptive
(C) Quantitative-Causal
(D) None of above
45. A researcher conducts a study in which participants are asked to describe the lived experience of being a caregiver of a parent with Alzheimer's disease. Which type of qualitative study does this represent?
(A) Grounded Theory
(B) Phenomenological Research
(C) Ethnography
(D) Narrative
(E) Case Study Research
46. Chi-square test is used for:
(A) Qualitative data
(B) Quantitative data
(C) Both
(D) None
47. The cardinal is red.
(A) Qualitative Observation
(B) Quantitative Observation
(C) Inference
(D) None of above
48. The brand of a soft drink.
(A) Qualitative
(B) Quantitative
49. The parrots range from bright green to dark red.
50. The surface was rough and shaded gray.
(A) Qualitative
(B) Quantitative
51. The presence or absence of a specific gene in a DNA sample.
(A) Qualitative
(B) Quantitative
52. The leaves on the bottom are stiffer than the leaves on top of the plant.
(A) Qualitative
(B) Quantitative
53. The bug is red
(A) Quantitative data
(B) Qualitative data
54. The dog was white and black.
(A) Qualitative
(B) Quantitative
55. The sky is greyish-blue.
(A) Qualitative
(B) Quantitative
56. Information describing color, odor, shape, or some other physical characteristic
(A) Dependent Variable
(B) Qualitative Data
(C) Quantitative Data
(D) Control Group
57. Student email addresses
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio

1.1.4 Quantitative Data

1. How many miles do you live from school?
(A) Categorical
(B) Quantitative
2. Which one of the following survey questions would generate numerical data?
(A) What is your favourite colour?
(B) What type of car does your family own?
(C) How long does it take for you to travel to school?
(D) What type of dog do you own?
3. Express the 55% as a decimal
(A) 0.055
(B) 0.55
(C) 5.5
(D) 0.0055
4. A researcher asks passers-by their views on litter in the town centre using a series of 'yes' and 'no' questions. What type of data is produced?
(A) Qualitative data
(B) Quantitative data
5. Which one of the followings indicates child's physical growth?
(A) Negative
(B) Quantitative
(C) Qualitative
(D) Positive
6. Variables which are numerical in nature
(A) Dichotomic
(B) Polynomic
(C) Qualitative
(D) Quantitative
7. Types of Quantitative Data and Measuresan instrument that measures positive or negative effects for or against a topic. (Adaptive Behavior Scales)
(A) Personal assessment
(B) Affective scale
(C) Behavioral checklist
(D) Public document or school records
8. The flower has 6 petals.
(A) Qualitative
(B) Quantitative
9. On average, how many different people do you text on a given day?
(A) Categorical
(B) Quantitative
10. Change 98.3% to a decimal
(A) 9830
(B) 983
(C) 9.83
(D) 0.983
11. There were 16 people in the room.
(A) Qualitative
(B) Quantitative
12. The number of miles it takes to use up a tank of gas.
(A) Discrete
(B) Continuous
13. There are 8 planets in the solar system.
(A) Qualitative
(B) Quantitative
14. There are 54 players on the Carolina Panthers football team.
(A) Qualitative
(B) Quantitative
15. How many hours you have slept in the past 24 hours.
(A) Qualitative
(B) Quantitative
16. Container ships carry 24 tons of cargo.
(A) Inference
(B) Quantitative
(C) Qualitative
(D) None of above

17. How many siblings do you have?
(A) Quantitative data
(B) Qualitative data
18. The speed of a train
(A) Qualitative
(B) Quantitative
(C) Continuous
(D) Discrete
19. Data such as “10 drops” is referred to as ____
(A) Robust data
(B) Qualitative data
(C) Control data
(D) Quantitative data
20. A scientist is measuring the volume of air in a balloon. What data type does this example represent?
(A) Categorical: Nominal
(B) Categorical: Ordinal
(C) Numerical: Discrete
(D) Numerical: Continuous
21. Lesson 12-1 One of ten equal parts of a whole is one ____?
(A) Greater
(B) Hundredth
(C) Tenth
(D) Decimal point
22. WEIGHT IN KILOGRAMS
(A) ARRANGEMENT: UNGROUPED
(B) ARRANGEMENT: GROUPED
(C) MEASUREMENT: DISCRETE
(D) MEASUREMENT: CONTINUOUS
23. The result of adding two or more numbers
(A) Sum
(B) Numerals
(C) Subtraction
(D) Quotient
24. The bottle can hold 1 L of liquid.
(A) Quantitative observation
(B) Qualitative observation
(C) An observation
(D) None of the answers
25. Molly has 5,256 stickers. Lee has 5,093 stickers while Marie has 5,195 stickers. Who has the least number of stickers?
(A) Molly
(B) Lee
(C) Marie
(D) None of above
26. Students roll a car down a ramp and record how far it travels.
(A) Categorical Data
(B) Numerical Data
(C) Change Over Time
(D) None of above
27. The number of questions you answered correctly in this test.
(A) Discrete data
(B) Continuous data
28. The number of books in your locker.
(A) Continuous
(B) Discrete
29. There are ten buttons on the table.
(A) Qualitative
(B) Quantitative
30. Which of the following is a characteristic of continuous data?
(A) Can take any value
(B) Can only take particular values
(C) Is always qualitative
(D) Is always categorical
31. Eesha has a bar of chocolate divided into 5 equal parts. She eats 3 parts of it. Leo has another bar of chocolate also divided into 5

- equal parts. He eats 2 parts of it. If we combine the parts of chocolate that Eesha and Leo ate, what fraction of a whole chocolate bar does it represent?
- (A) $1/1$
(B) $5/3$
(C) $2/5$
(D) $3/5$
32. Sargento cheese slices \$2.48 for 10 slices or Velveeta Cheese slices \$3.18 for 12 slices Find the unit price for each and choose the better deal.
(A) Sargento
(B) Velveeta
33. The temperature during a football game
(A) Quant
(B) Qual
34. How many states have you visited in your lifetime?
(A) Categorical
(B) Quantitative
35. Which three numbers have the same answer. Whether they are added or multiplied together.
(A) 2,3,4
(B) 1,2,3
(C) 4,5,1
(D) 1,6,7
36. Your friend's score on an intelligence test
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
37. What is the term for the following definition? Data that use numbers with a unit of measurement, such as the length of an insect in millimeters (millimeter is the unit of measurement) or the weight of a projectile in kilograms (kilograms is the unit of measurement).
(A) Quantitative data
(B) Qualitative data
(C) Categorical data
(D) Ordinal data
38. How much did you score on the exam?
(A) Quantitative data
(B) Qualitative data
39. Are polls usually qualitative or quantitative research?
(A) Quantitative
(B) Qualitative
(C) Either
(D) None of above
40. Facts or data that use numbers
(A) Statistics
(B) Voice of authority
(C) Source
(D) Bias
41. What kind of observation is being made in the following statement: 'The mass of the chocolate cake is 250 g.'
(A) Qualitative
(B) Quantitative
42. Mean proportional between c and d is
(A) Ab
(B) $\sqrt{ab}$
(C) $C \times d$
(D) $\sqrt{cd}$
43. My shoe size is 8.
(A) Qualitative
(B) Quantitative
44. The cardinal has 1 beak.
(A) Qualitative Observation
(B) Quantitative Observation
(C) Inference
(D) None of above

45. Snow fell consistently for 6 hours. Harps said: 'We have had 30 cm of snow in 6 hours' How much Snow per hour?
- (A) 6 cm of snow per hour
 - (B) 30 cm of snow per hour
 - (C) 5 cm of snow per hour
 - (D) 3 cm of snow per hour
46. Meta-analysis
- (A) Quantitative
 - (B) Qualitative
47. There are 54 players on the Philadelphia Eagles football team.
- (A) Qualitative
 - (B) Quantitative
48. The number of orange Skittles in a bag.
- (A) Discrete
 - (B) Continuous
49. A number or a unit that is defined by quantity, such as length, mass, and volume.
- (A) Communication
 - (B) Data Collection
 - (C) Measurement
 - (D) Experimentation
50. Which type of data is measured in numbers and can be expressed in terms of quantity?
- (A) Quantitative data
 - (B) Ordinal data
 - (C) Categorical data
 - (D) Qualitative data
51. There were seven boxes of cookies in the cupboard.
- (A) Qualitative
 - (B) Quantitative
52. The sides of a dice
- (A) Qualitative
 - (B) Quantitative
 - (C) Continuous
 - (D) Discrete
53. Observations, like measurements, are ___ observations
- (A) Quantitative
 - (B) Qualitative
 - (C) Operational
 - (D) Scientific
54. What kind of data is shown in this example? The shark is 10 feet long.
- (A) Quantitative Data
 - (B) Qualitative Data
55. Data associated with mathematical models and statistical techniques
- (A) Quantitative Data
 - (B) Mixed Methods Research
 - (C) Quantitative research
 - (D) Secondary Data
56. Which symbol correctly shows the relationship between 14.2 and 14.20?
- (A) >
 - (B) <
 - (C) =
 - (D) +
57. Earned income per week
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
58. How many hours it takes to finish your stats homework
- (A) Quantitative
 - (B) Qualitative
59. How many glasses of water do you drink during an average day?
- (A) Categorical
 - (B) Quantitative
60. Measuring and recording numerical data.
- (A) Inference
 - (B) Qualitative Observation

- (C) Prediction
(D) Quantitative Observation
61. There are 3 more blue beads than red beads.
(A) Qualitative
(B) Quantitative
(C) Both
(D) Neither
62. The height of a tree is being measured over time. What data type does this example represent?
(A) Categorical: Nominal
(B) Categorical: Ordinal
(C) Numerical: Discrete
(D) Numerical: Continuous
63. Which one is greater: $\frac{1}{2}$ or $\frac{2}{4}$?
(A) $\frac{1}{2}$
(B) $\frac{1}{4}$
(C) They are equal. (Equivalent Fractions)
(D) None of above
64. A baker sells 17 donuts and 8 cupcakes. How many fewer cupcakes than donuts does he sell?
(A) 8
(B) 5
(C) 9
(D) 20
65. The number of touchdowns the Eagles score each year
(A) Discrete
(B) Continuous
66. Give an example of continuous data in real life.
(A) The number of students in a classroom.
(B) The temperature measured in degrees Celsius.
(C) The number of cars in a parking lot.
(D) The number of pages in a book.
67. The number of balloons in a store
(A) Qualitative Data
(B) Quantitative Data
68. The total number of pets owned by students in mrs. Raabe's class is-
(A) Greater than 45, but fewer than 50
(B) Greater than 5, but fewer than 10
(C) Greater than 30, but fewer than 35
(D) Greater than 50, but fewer than 55
69. Which of the following are Continuous Quantitative Data?
(A) Observations & Errors
(B) Observations & Time
(C) Time & Height
(D) Time & Errors
70. Miley earns \$10 per hour babysitting. Is the amount of money earned proportional to the number of hours she spends babysitting?
(A) Yes
(B) No
(C) Sometimes
(D) Never
71. Recently, Ruth listened to $\frac{5}{7}$ of her favorite songs. Tess listened to $\frac{1}{4}$ of her favorite songs. Who listened to a greater fraction of her favorite songs?
(A) Ruth
(B) Tess
72. Information expressed numerically, such as test scores or measurements of length or width. These data may or may not have a real zero, but they have order and often equal intervals. (Unit 1 Vocabulary)
(A) Dependent Variable
(B) Quantitative Data
(C) Hypothesis
(D) Naturalistic Observation
73. Match 0.05 with its fraction and percentage!
(A) $0.05 = \frac{5}{10} = 5\%$

- (B) $0.05 = 5/100 = 0.5\%$
 - (C) $0.05 = 5/100 = 5\%$
 - (D) $0.05 = 5/10 = 0.5\%$
74. A survey of heights of lampposts is carried out to find out if there is any variation across the country. What sort of data is being collected in such a survey?
- (A) Quantitative-Discrete
 - (B) Qualitative-Discrete
 - (C) Quantitative-Continuous
 - (D) Qualitative-Continuous
75. What is the purpose of spreadsheets?
- (A) To present information on different engaging slides
 - (B) To deliver a speech to a crowd
 - (C) To perform basic and complex math computations in an organized way
 - (D) To excel your research papers and citations
76. What is the definition of the mean?
- (A) The average
 - (B) The middle number
 - (C) The difference between the highest and lowest numbers
 - (D) The number that occurs the most
77. Students in 5th grade identify the number of pets that live at their house.
- (A) Categorical
 - (B) Change over time
 - (C) Numerical
 - (D) None of above
78. What is a benefit of using closed questions in research?
- (A) They provide qualitative data.
 - (B) They provide quantitative data.
 - (C) They provide detailed information on a topic
 - (D) They provide an opportunity to justify responses.

1.1.5 Structured and Unstructured Data

1. What are the challenges of processing unstructured data?
 - (A) Time-consuming and energy expensive
 - (B) Lack of machine-readable structure
 - (C) Efficient retrieval and processing
 - (D) High degree of organization
2. Miss Tanya is scoring her students' output with the use of rubrics. What type of observation method is shown?
 - (A) Structured
 - (B) Unstructured
 - (C) Covert
 - (D) Overt
3. Word, PDF, Text, and Media logs are considered unstructured data.
 - (A) True
 - (B) False
4. Which one is NOT the advantages of Structured Data?
 - (A) Easily used by machine learning algorithms
 - (B) Fast accumulation rates
 - (C) Easily used by business users
 - (D) Accessible by more tools
5. Which one is the advantages of Unstructured Data?
 - (A) Native format
 - (B) Specialized tools
 - (C) Data lake storage
 - (D) Easily used by business users
6. The images that were taken in a work process improvement meeting residing the company shared drive (Sharepoint) are considered ____ files.
 - (A) Internal, unstructured

- (B) External, unstructured
 - (C) Internal, structured
 - (D) External, structured
7. What is a data lake best suited for?
- (A) Storing and structuring transactional data
 - (B) Handling large volumes of structured and unstructured data
 - (C) Managing real-time analytics
 - (D) Replacing traditional databases
8. Email and Web pages are examples of ____
- (A) Structured Data
 - (B) Semi-structured Data
 - (C) Unstructured Data
 - (D) None of above
9. Amongst which of the following can be considered as the main source of unstructured data
- (A) Twitter (X)
 - (B) Facebook
 - (C) Webpages
 - (D) All of the mentioned above
10. What is the main difference between structured and unstructured data?
- (A) Structured data is quantitative, while unstructured data is qualitative
 - (B) Structured data is qualitative, while unstructured data is quantitative
 - (C) Structured data is hard to interpret, while unstructured data is easy to search and analyze
 - (D) None of above
11. What percentage of enterprise data is estimated to be in an unstructured format?
- (A) 20%
 - (B) 50%
 - (C) 80%
 - (D) 100%
12. What type of data is typically stored in an unorganised format, such as text documents or social media posts?
- (A) Structured
 - (B) Unstructured

1.1.6 Data Classification

1. While setting local self government bodies in the cities, the government classifies by the
- (A) Population
 - (B) Land area
 - (C) Power
 - (D) Election
2. What is data classification?
- (A) A strategy to assign labels to data
 - (B) A strategy to distinguish data at rest from data in transit and data in motion
 - (C) A strategy to group data according their need of protection
 - (D) A strategy to collect different kinds of data
3. Which are levels of data classification?
- (A) Ratio level
 - (B) Nominal level
 - (C) Integral level
 - (D) Descriptive level
4. Which one of the following survey questions would generate categorical data?
- (A) How many times do you eat at your favourite fast-food place in a typical week?
 - (B) How much do you usually spend buying your favourite fast food?
 - (C) How many items did you buy last time you went to your favourite fast food place?
 - (D) Which is your favourite fast food?
5. Which scientific concept can be effectively illustrated using a Venn Diagram?
- (A) The classification of living organisms into kingdoms.

- (B) The phases of the water cycle.
 - (C) The process of photosynthesis.
 - (D) The structure of an atom.
6. The placing of information or objects into groups based on certain similarities is ____
- (A) Biochemical analysis
 - (B) Classification
 - (C) Phylogeny
 - (D) Speciation
7. What type of data is typically used in unsupervised learning?
- (A) Structured data
 - (B) Labeled data
 - (C) Unlabeled data
 - (D) Supervised data
8. How many cows are there in that field?
- (A) Continuous
 - (B) Discrete
9. This demands that firms group their customers into relatively homogeneous groups:
- (A) Demand estimation.
 - (B) Segmentation and targeting.
 - (C) Monitoring the environment.
 - (D) Developing business intelligence system.
10. The important feature of ____ over nominal scale is that it indicates the relative position, not the magnitude of the difference between the objects.
- (A) Nominal scale
 - (B) Ordinal Scale
 - (C) Interval Scale
 - (D) Ratio Scale
11. One of the characteristics of mathematics where it generates a series of mental relations through which objects are grouped according to similarities and differences depending on specific criteria such as shape, color, size, etc.
- (A) Logical Sequence
 - (B) Classification
 - (C) Abstractness
 - (D) Structure
12. Which one of the following is discrete data?
- (A) Sam is 160 cm tall
 - (B) Sam weighs 60 lbs.
 - (C) Sam ran 100 meters in 10.2 seconds
 - (D) Sam has two brothers and one sister
13. Rows are called ____
- (A) Fields.
 - (B) Records.
 - (C) Table.
 - (D) Entry.
14. Which of the following statement is true about classification?
- (A) It is a measure of accuracy
 - (B) It is a subdivision of a set
 - (C) It is the task of assigning a classification
 - (D) None of the above
15. Dissolved oxygen, pH, nitrates, and salinity are ____ factors used to determine water quality.
- (A) Physical
 - (B) Chemical
 - (C) Biological
 - (D) None of above
16. Identify the classifications of data ____
- (A) Primary, secondary, discrete, Interviews, observations and nominal
 - (B) Discrete, secondary, interval, ratio and secondary
 - (C) Secondary, discrete, ratio, interval, focus groups and observations
 - (D) Nominal, ordinal, discrete, interval, ratio and continuous
17. You're classifying data values (range from 0 to 100) into 5 classes. The classes are 0-20, 21-40, 41-60, 61-80, 81-100. The classification method used is:
- (A) Quantile

- (B) Jenks breaks
(C) Equal interval
(D) Standard deviation
18. The data type for the field unit price in the table is
(A) Number
(B) Currency
(C) Text
(D) OLE object
19. Classifying students based on academic merit or potential
(A) Social placement
(B) Sorting
(C) Tracking
(D) None of above
20. Danielle has been given a bottle with a mixture of coins. Her parents said that she may keep all the coins if she sorts them into groups of pennies, nickels, dimes, and quarters. Danielle's parents have asked her to — the coins.
(A) Select
(B) Classify
(C) Rank
(D) Mis
21. What is the operation of researching documents and arranging them into a logical system?
(A) Classification and systematization theory method.
(B) Analytical synthesis theory method.
(C) Hypothesis method.
(D) Historical method.
22. Which of the following refers to the process of assign descriptive tags to data?
(A) Data tagging
(B) Data classification
(C) Data labeling
(D) Data describing
23. The process of grouping the data according to their characteristics is called ____
(A) Classification of data
(B) Organisation of data
(C) Tabulation of data
(D) Presentation of data
24. With this classification method all classes have the same number of features:
(A) Quantile
(B) Equal interval
(C) Natural breaks
(D) Standard deviation
25. Where would the number-4.5 fit in the Venn diagram?
(A) Rational Numbers
(B) Integers
(C) Whole Numbers
(D) None of above
26. The different subjects taught in a school (e.g., maths, science, history) are classified as:
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
27. The number of suitcases lost by airlines.
(A) Discrete
(B) Continuous
28. The length of cars in the car park
(A) Qualitative
(B) Quantitative
(C) Continuous
(D) Discrete
29. What does each tally mark represent?
(A) One hour of time
(B) One unit or count
(C) A type of measurement
(D) A group of five

30. A survey asks participants to state their favourite activity during a Holiday 'camp day'. What type of data is being collected?
- (A) Quantitative
 - (B) Qualitative
 - (C) To arrange data in a specific order
 - (D) To protect the data
31. Personal data, admission and discharge information, payments, insurance status, disease history comes under ____ form of data.
- (A) Image
 - (B) Video
 - (C) Text
 - (D) None of the above
32. The appropriate data type that can be used to store a customers telephone number in a database is
- (A) Number
 - (B) Date
 - (C) Text
 - (D) Memo
33. If the largest number in a list is 100 and the smallest is 11, what should the class width be in order to have 6 classes?
- (A) 14
 - (B) 15
 - (C) 16
 - (D) 17
34. Percent of students taking the SAT
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
35. Classification methods used can provide a different impression of the data.
- (A) True
 - (B) False
36. What is the purpose of sorting data in a spreadsheet?
- (A) To delete unnecessary data
 - (B) To format the data
 - (C) To arrange data in a specific order
 - (D) To protect the data
37. All fields for a specific entity can be grouped together as a ____
- (A) File.
 - (B) Field.
 - (C) Record.
 - (D) All the above.
38. Explain the process of creating a data table.
- (A) Randomly assign data types to variables
 - (B) Organize data into a pie chart
 - (C) Identify variables, determine data types, and organize data into rows and columns.
 - (D) Mix all the data together in one column
39. There were 17 boys and 12 girls on the yellow school bus.
- (A) Quantitative
 - (B) Qualitative
 - (C) Both
 - (D) Neither
40. Data that describes a group of people by age, marital status, gender, etc.
- (A) Psychographic data
 - (B) Demographics
 - (C) Geographic data
 - (D) None of above
41. How many main types of information classification are there?
- (A) 3
 - (B) 5
 - (C) 4
 - (D) 6
42. Which classification is used when data is grouped by location?
- (A) Quantitative
 - (B) Qualitative
 - (C) Geographical
 - (D) Chronological

43. Number of pages in a book-Is this numerical data classified as Discrete or Continuous?
(A) Discrete
(B) Continuous
44. Which item would most appropriately be recorded under teaching and learning activities rather than general information?
(A) Number of students enrolled
(B) Learning standard code
(C) Subject domain or strand
(D) Time allocation per step
45. Which of the following roles does perform data classification?
(A) Data owner
(B) Data custodian
(C) Users
(D) Security professionals
46. Data that provides information about a customer's age, gender, or ethnicity
(A) Behavioral
(B) Geographical
(C) Demographic
(D) Psychographic
47. Match the description with the correct term. categorizes, labels, classifies, names, or identifies types of kinds of things that can't be quantified.
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
48. Which among the following is a process skill
(A) Listening
(B) Classifying
(C) Talking
(D) Looking
49. Which of the following is a part-to-whole relationship?
(A) Dog to Bark
(B) Hot to Cold
(C) Finger to Hand
(D) Car to Vehicle
50. Class-interval need to be mutually exclusive.
(A) True
(B) False
51. Which method is commonly used to classify data in biology?
(A) Taxonomy
(B) Astrology
(C) Alchemy
(D) Numerology
52. A type of classification where the data are collected from different places are placed in different classes
(A) Classification on Geographical Basis
(B) Classification on Periodical Basis
(C) Simple Classification
(D) None of above
53. Requisites of a good classification
(A) Flexibility
(B) Stability
(C) Heterogeneity
(D) Homogeneity
54. There are 16 red marbles in the bag.
(A) Qualitative
(B) Quantitative
(C) Both
(D) Neither
55. Roles and responsibilities for data classification should be contained in what document?
(A) Data Classification Policy
(B) Data Classification Guidelines
(C) Data Classification Procedure
(D) Data Classification Manual

56. The process of grouping the statistical data under various understandable homogenous groups for the purpose of convenient interpretation.
- (A) Data Coding
 - (B) Classification
 - (C) Data Analysis
 - (D) Data Interpretation
 - (E) Describe Data
57. What is the main objective of data classification?
- (A) To label data based on its value and sensitivity
 - (B) To compress large datasets
 - (C) To remove redundant data
 - (D) To share data across networks
58. High entropy means that the partitions in classification are
- (A) Pure
 - (B) Not pure
 - (C) Useful
 - (D) Useless
59. How do we organize our data BEFORE creating a stacked bar chart?
- (A) Groups
 - (B) Contingency Table/ Two Way Table
 - (C) Frequency Table
 - (D) You do not need to organize the data first
60. Type of File Text
- (A) . fle. swf. avi. mpg. mp4. mov. wmv
 - (B) . bmp. tif. wmf. gif. jpg. png. eps. ai
 - (C) . txt. dat. rtf. docx. doc. odt. wpd. pages
 - (D) . wav. mid. mp3. m4p. aac
61. What is the data type used to tag geographical information in Excel?
- (A) Geography Data Type
 - (B) Map Chart
 - (C) Sunburst Chart
 - (D) Combo Chart
62. The numbers which don not make perfect pairs are called ____ numbers.
- (A) Even
 - (B) Successor
 - (C) Roman
 - (D) Odd
63. Your zip code
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
64. Classify the Number:-23
- (A) Rational
 - (B) Rational, integer
 - (C) Integer
 - (D) Rational, whole
65. Classification or grouping by similarity or similarities.
- (A) Inference
 - (B) Data Collection
 - (C) Classification
 - (D) Prediction
66. Grade point average
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
67. What is the best classification for this number? $1/4$
- (A) Integer
 - (B) Rational
 - (C) Natural number
 - (D) Whole
68. The different teaching methods used in a classroom (e.g., lecture, discussion, group work) are classified as:
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio

69. Which database field type would be used to store a customer's account balance?
- (A) Numeric.
 - (B) Object.
 - (C) Currency.
 - (D) Text.
70. The process for sorting through and organizing the research notes. For example, research papers can be organized by cause/effect relationships, comparison, persuasive appeals, problem/solution, etc.
- (A) MLA style
 - (B) Categorizing
 - (C) Transitions
 - (D) None of the above
71. To count, list, or itemize
- (A) Depict
 - (B) Enumerate
 - (C) Interpret
 - (D) Consensus
72. Chronological classification is:
- (A) Classification on the basis of time.
 - (B) Classification on the basis of location
 - (C) Classification on the basis of quality
 - (D) Classification on the basis of quantity
73. How did early scientists start classifying organisms?
- (A) By observable traits
 - (B) By genetic code
 - (C) By their coloring only
 - (D) By their photosynthetic ability
74. Film Classifications Australia must complete the rating of a new movie release between G Rated-R18+ Rated. What data type does this example represent?
- (A) Categorical: Nominal
 - (B) Categorical: Ordinal
 - (C) Numerical: Discrete
 - (D) Numerical: Continuous
75. A researcher needs to gauge agreement with statements on a five-point scale from Strongly Disagree to Strongly Agree. What measurement approach should be used?
- (A) Nominal coding with categorical labels
 - (B) Semantic differential with bipolar terms
 - (C) Ratio scale with true zero baseline
 - (D) Likert scale with ordered agreement points
76. Classify $\frac{3}{5}$
- (A) Rational
 - (B) Irrational
77. Separating by a class of things or placing ideas into categories following a clear principle or basis
- (A) Division & classification
 - (B) Description
 - (C) Process analysis
 - (D) Definition

1.1.7 Sources of Data

1. The quality of your research and the success of any paper on which it is based are directly related to your success in ____

 - (A) Locating relevant sources
 - (B) Locating relevant and significant sources
 - (C) Locating relevant, significant, and reliable sources.
 - (D) Locating relevant, significant, reliable, and current sources.

2. What are some strategies to determine the reliability of online sources?

 - (A) Checking the author's credentials, evaluating the website's domain and purpose, cross-referencing information with other sources, and looking for bias or misinformation.
 - (B) Ignoring the author's credentials and website's purpose
 - (C) Believing everything you read online
 - (D) Only using sources that agree with your

- preconceived notions
3. The types of sources in research are ____ and ____
- (A) Primary, secondary
 - (B) Primitive, secondary
 - (C) Basic, word of mouth
 - (D) Experiments, gossip
4. What is a Data Stream?
- (A) A source of data (Web, iOS, Android) feeding into a property.
 - (B) A method of data encryption for secure transmission.
 - (C) A type of database used for storing large datasets.
 - (D) A protocol for transferring files over the internet.
5. This source type is something written for the public, by a general writer, reviewed by simple editors, and contains little references.
- (A) Scholarly Source
 - (B) Popular Source
 - (C) Primary Source
 - (D) Source
6. What is "Statistics Sources"?
- (A) A government agency
 - (B) A statistical software package
 - (C) A reference work that provides an alphabetical guide to sources of statistical information
 - (D) A journal that publishes statistical data
7. Which of the following is an example of a tertiary source in science?
- (A) A scientific journal article
 - (B) A laboratory experiment
 - (C) A science dictionary
 - (D) A research conference paper
8. ETS.3.1 Part A What is the source of the message in this communication system?
- (A) The satellite
 - (B) The satellite dish
 - (C) The USGS data collection site
 - (D) The water data available on the internet- Tags7.ETS.3.1
9. Marketing Campaign Data
- (A) Machine generated data
 - (B) Human generated data
 - (C) Business generated data
 - (D) None of above
10. To which sources can you categorize the image shown?
- (A) Reference materials
 - (B) Books
 - (C) Government documents
 - (D) News/magazine articles
11. What distinguishes tertiary sources from primary and secondary sources?
- (A) They contain original research data
 - (B) They provide a detailed analysis of research
 - (C) They offer a broad overview and summary
 - (D) They are peer-reviewed articles
12. Encyclopedias are?
- (A) Primary source
 - (B) Secondary source
 - (C) Tertiary source
 - (D) None of above
13. In writing, one needs a lot of sources. What does the word sources mean?
- (A) Ideas for writing
 - (B) Opinions from people
 - (C) Materials for information
 - (D) Interviews from field experts
14. To gather information on the significant events in Philippine sports during a year, we use
- (A) Encyclopedia
 - (B) Almanac

- (C) Dictionary
(D) None of above
15. Sources that can be trusted are ____
(A) Dependable
(B) Believable
(C) Understandable
(D) Credible
16. Which of the following best describes 'non-traditional sources'?
(A) Sources that are formally published and peer-reviewed.
(B) Sources that include digital content like blogs and social media.
(C) Sources that are government documents and reports.
(D) Sources that are academic books and journal articles.
17. Where did the data come from?
(A) Research from a university
(B) Primary sources
(C) A textbook
(D) Expert economics
18. Whether or not the source of information is trustworthy
(A) Validity
(B) Reliability
19. What are primary and secondary sources in research?
(A) Primary sources are summaries of existing research.
(B) Primary sources are original materials from the time of study; secondary sources analyze or interpret those primary sources.
(C) Secondary sources are original documents from the time of study.
(D) Primary sources are always fictional stories.
20. What is the primary source of job data mentioned in the video?
(A) Glassdoor
(B) LinkedIn
(C) Wikipedia
(D) Bureau of Labor Statistics
21. Which aspect of research does the following explanation belong to? Find sources that will contain useful and current information related to my topic.
(A) Develop your topic
(B) Identify and evaluate sources
(C) Take well-organized notes
(D) Broaden or narrow your topic
22. Which of the following is a reliable source?
(A) A social media post by a friend
(B) A website from a well-known university
(C) A blog with no author name
(D) An advertisement on TV
23. There are mainly ____ sources of data
(A) 10
(B) 2
(C) 5
(D) 4
24. A document or written work created after an event
(A) Primary source
(B) Secondary source
(C) Third source
(D) Bias
25. Which is the best source to determine: Who was present at the signing of the Declaration of Independence?
(A) Source 1: A hollywood movie about the American Revolution made 2001.
(B) Source 2: A book written by a famous historian who is an expert on the American Revolution, published in 1999.
26. Sourcing is ____
(A) Locating a document in a time and place
(B) Considering multiple sources

- (C) Evaluating sources and analyzing rhetoric
(D) Considering who wrote a document and under what circumstances
27. The review of related literature includes the following type of research sources?
(A) Primary sources
(B) Secondary sources
(C) Online sources
(D) All of the Above
28. Which source type is most likely to include a bibliography?
(A) Primary source
(B) Secondary source
(C) Tertiary source
(D) Experimental data
29. What is the main goal of Lesson 16: Sources and Research?
(A) To learn how to code a website
(B) To understand how search engines work
(C) To find relevant and trustworthy information online
(D) To create a social media profile
30. Which vocab word means: "Anyone interviewed for a news story."
(A) Lede
(B) Source
(C) Copy
(D) Caption
31. Which is an example of a syndicated data source?
(A) Government census
(B) Company's financial statements
(C) Nielsen consumer panel reports
(D) Employee attendance records
32. Which of the following best describes the types of data used in BI?
(A) Only external structured data
(B) Internal or external, structured or unstructured data from various sources
(C) Only financial data from internal sources
(D) Unstructured data only
33. Internal data comes from:
(A) Within the organization
(B) From the government
(C) Inside the target market
(D) Inside the human mind
34. Which of the following is NOT a valid data source for Power BI?
(A) Excel
(B) SQL Server
(C) PDF
(D) Instagram
35. Tell which material is MOST suited for the research: The Perception of Career Readiness of Incoming Senior High Graduates
(A) A pdf file on Aspiration and Readiness of Filipino Senior High School Students in Pursuing College Degree
(B) A research on Perceptions of the Senior High School Students on their Employability Skills
(C) SHS textbook on ABM
(D) An interview
36. In evidence source, we include
(A) Primary and secondary sources.
(B) Pure and applied sources.
(C) Active and passive sources.
(D) None of the above.
37. What is a key benefit of Point-of-Sale (POS) data?
(A) Predict customer churn
(B) Provide real-time sales insights
(C) Forecast economic conditions
(D) Automate inventory replenishment
38. Grace is working on a school project and needs the most up-to-date information.

- Which type of printed resource should she use?
- (A) Encyclopedias
 - (B) Books
 - (C) Newspapers
 - (D) Journals
39. A ____ refers to acquiring information for your report from a book, newspaper article, website, etc.
- (A) Source
 - (B) Plagiarism
 - (C) MLA Style
 - (D) Table of Contents
40. Sources for focused research often fall into two broad categories, which are:
- (A) Primary and secondary
 - (B) Primary and general
 - (C) Secondary and specialized
 - (D) General and specialized
41. Which of the following is NOT mentioned as a source to gather information?
- (A) Library
 - (B) Nonfiction texts
 - (C) Online kid-friendly websites
 - (D) Fiction books
42. Whether a source contains information that is factual and true
- (A) Validity
 - (B) Reliability
43. Data collected by research institutions, scholars, trade associations but not published is
- (A) Published sources
 - (B) Unpublished sources
 - (C) Collective data
 - (D) Personal data
44. In what criterion in evaluating sources does this statement “Is the source published digitally or printed?” belong?
- (A) Location of Sources
 - (B) Currency
 - (C) Authority
 - (D) Relevance
45. Doug is thinking of opening another location for his sporting goods store in another area. What type of research would be conducted to determine the best location for his new store?
- (A) Product
 - (B) Advertising
 - (C) Sales
 - (D) Market
46. Journalists looking for sources should try to use
- (A) A variety of sources representing different opinions
 - (B) Close friends and relatives
 - (C) Officials who will expect some favor in return
 - (D) Officials with whom the journalist has a close personal relation
47. Where can you find compensation information for German market?
- (A) Corporate Governance report
 - (B) Annual report
 - (C) Sustainability report
 - (D) Earnings Call
48. Why should you use reliable sources?
- (A) So the information you find is accurate
 - (B) You shouldn't use reliable sources
 - (C) So you can be a more trustworthy human being
 - (D) None of the above
49. Handbooks
- (A) Primary Sources
 - (B) Secondary Sources
 - (C) Tertiary Sources
 - (D) None of the Choices
50. Which of the following is a key component of internal data sources?

- (A) Social media data
 - (B) Market research
 - (C) Enterprise systems data
 - (D) Public databases
51. Internal data sources refer to:
- (A) Data collected by external agencies
 - (B) Data available within an organization
 - (C) Data collected through government agencies
 - (D) Data collected via surveys
52. Which source would be most appropriate for locating information related to the topic of this passage?
- (A) A website maintained by the U.S. Department of Education
 - (B) An online website created by physical education teachers
 - (C) A novel about a person who decided to become a physical education teacher
 - (D) An online search for different exercise routines
53. If a fraud examiner was gathering information about a fraud suspect, which of the following types of information would likely require access to nonpublic sources of information to obtain?
- (A) The subject's phone history records,
 - (B) The subject's habits and lifestyle,
 - (C) Where the subject currently resides,
 - (D) All of the above
54. What type of source of information is shown in the picture?
- (A) Print
 - (B) Actual footage
 - (C) Online
 - (D) None of above
55. Sources that compile information from a wide variety of other source documents and convey the author's interpretation of the information. These are often not appropriate for academic research since the sources may not be well cited.
- (A) Source
 - (B) Primary Source
 - (C) Secondary Source
 - (D) Tertiary Source
56. Using the firm's internal records as a research tool is an example of
- (A) Marketing Information System
 - (B) PMS
 - (C) External Sources
 - (D) Internal sources
57. Previous studies that involves similar variables including theses, dissertations, scholarly written papers, studies, published and unpublished.
- (A) Primary sources
 - (B) Related studies
 - (C) Related literature
 - (D) Secondary sources
58. Correct expansion of 'AISHE'
- (A) All India Statistics on Higher Education-
alists
 - (B) All India Statistics on Higher Education
 - (C) All India Survey on Higher Educational-
ists
 - (D) All India Survey on Higher Education
59. Source Relevancy evaluates a source to
- (A) Determine if the author is credible
 - (B) Determine if the source information is correct
 - (C) Determine if the source is right for your project
 - (D) Determine if the source is current
60. Best source to use for researching scientific topics.
- (A) Wikipedia
 - (B) Textbook
 - (C) Ask your teacher
 - (D) A science journal

61. Researched data for use in a report
(A) Search Engine
(B) Source
(C) Primary Source
(D) Periodical
62. Sources that are believable and recognizable as quality sources
(A) Counterclaim or counterargument
(B) Rebuttal
(C) Thesis
(D) Credible sources
63. Which data source is used to identify eligible schools in Stage 2 of the PM SHRI selection process?
(A) CBSE Board Data
(B) State Board Exam Results
(C) UDISED+ Data
(D) National Achievement Survey
64. Secondary data and Primary data can be useful to marketers for decision making
(A) False
(B) True
65. The researcher included the forms of introspection, vicarious experiences and other people's analysis of events. What type of sources of knowledge is used?
(A) Empirical
(B) Nonempirical
(C) Basic
(D) Evaluation

1.1.8 Primary Data

1. An original artwork by an artist
(A) Primary
(B) Secondary
2. Which method involves group discussions to gather data?
(A) Focus groups
(B) Interviews
(C) Questionnaires
(D) Television
3. What is the importance of using primary sources in social studies teaching?
(A) Using primary sources helps students develop critical thinking skills and gain a deeper understanding of historical events.
(B) Secondary sources are more accurate and reliable than primary sources
(C) Primary sources are too difficult for students to understand
(D) Using primary sources is irrelevant in social studies teaching
4. A company is considering to make certain changes to a current product design. But it is not sure to implement before the findings of marketing research. What type of research you would recommend?
(A) Qualitative
(B) Exploratory
(C) Descriptive
(D) Pure
5. ___ research you conduct yourself (or hire someone to do for you.) It involves going directly to a source-usually customers and prospective customers in your target market-to ask questions and gather information. The research can include focus groups, surveys, interviews, and observations.
(A) Quantitative Research
(B) Primary Research
(C) Secondary Research
(D) Qualitative Research
6. What is the new research done by or for the organization itself?
(A) Tertiary Research
(B) Primary Research
(C) Long term Research
(D) Secondary Research

7. Which of these is an example of a research method that produces primary data?
- (A) Interview
 - (B) Book
 - (C) Journal
 - (D) Newspaper
8. First-hand information that you gather yourself.
- (A) Quantitative Data
 - (B) Qualitative Data
 - (C) Primary Research
 - (D) Secondary Research
9. Which of the following is an example of an observational study?
- (A) Conducting a survey.
 - (B) Giving participants a new drug and measuring results.
 - (C) Changing classroom lighting and observing student performance.
 - (D) Running a simulation in a computer model.
10. Data obtained by direct observations:
- (A) Judgemental data
 - (B) Observational data
 - (C) Summative data
 - (D) Follow up data
11. Is it primary (direct from source) or secondary (indirectly)? "A photo"
- (A) Primary
 - (B) Secondary
12. Fisher-Price sets up locations where they can watch kids play with new toys. This is an example of ____ research.
- (A) Experimental
 - (B) Observational
 - (C) Survey
 - (D) Telephone
13. A researcher is interested in studying the behavior of high-school basketball teams. Over one season, she joins the team during practice, watching the players' interactions first-hand. What type of research is this?
- (A) A questionnaire
 - (B) An interview
 - (C) A case study
 - (D) Participant observation
14. The most preferable sources for a literature review are:
- (A) Primary data
 - (B) Secondary data
 - (C) Tertiary data
 - (D) None of the above
15. Materials containing firsthand evidence of historical events, usually recorded by someone who participated, witnessed, or lived through the event
- (A) Thesis
 - (B) Topic
 - (C) Secondary sources
 - (D) Primary sources
16. What is a primary source of information for OSINT analysts?
- (A) Publicly available websites
 - (B) Classified government reports
 - (C) Internal company documents
 - (D) Private databases
17. A researcher can work on a problem that can be addressed through observation.
- (A) Analytical
 - (B) Cyclical
 - (C) Logical
 - (D) Empirical
18. Which primary data collection method involves collecting data by analyzing the speech and language patterns of individuals or groups, with a focus on understanding how these patterns are related to social and cultural factors?
- (A) Sociolinguistics
 - (B) Psycholinguistics
 - (C) Neurolinguistics
 - (D) Applied linguistics

1.1.9 Secondary Data

1. As a researcher, you need references that are the sources of your literature. What type of literature sources reports or describes other people's experience
(A) General sources
(B) Primary sources
(C) Secondary sources
(D) Source materials
2. When analyzing existing datasets to answer new questions, which technique is used?
(A) Structured laboratory observation
(B) Second data analysis of archives
(C) Primary survey administration
(D) Quasi-experimental field test
3. What type of source is this? A magazine article from 2011 titled "Mining in the Old West in the 1860's-1890's"
(A) Primary
(B) Secondary
4. Identify if the following is primary or secondary data. Data: A textbook on air safety that includes the accident as a case study
(A) Primary Data
(B) Secondary Data
5. Findings of published and unpublished researches which are related to the present studies.
(A) Related legal bases
(B) Related literature
(C) Related studies
(D) Literature review
6. Studies or researches published in the past time which reported research results or findings.
(A) Questionnaire
(B) Observation
(C) Interview
(D) Previous Studies
7. A textbook describing the civil rights movement
(A) Primary source.
(B) Secondary source.
(C) Either (A) or (B).
(D) Neither (A) nor (B).
8. Originally used for research purposes and then stored for possible use later | may be in print form or in computer-usable form (e.g. census data, social science research data stored and kept by research-related orgs)
(A) Archived Research Data
(B) Official Documents
9. Which method is described as using publicly available data such as census or newspaper records?
(A) Surveys
(B) Observational
(C) Archival
(D) Experimental
10. Government reports would be which kind of market research?
(A) Field Research
(B) Quantitative Research
(C) Desk Research
(D) Target research
11. The Literature review is also known as the:
(A) Primary
(B) Secondary
(C) None of the above
(D) All of the above
12. What is archival research?
(A) Archival research is the study of marine life in the Arctic.
(B) Examines records, whether archived as a hardcopy or electronically
(C) Archival research involves conducting surveys to gather new data.
(D) Archival research focuses on predicting future trends based on historical data.

1.1.10 Data Acquisition

1. A researcher wishes to conduct a survey of research staff at the University of Kent, to investigate their views about proposed changes to the library opening times. She obtains a list of all of the university's research staff, and selects 100 people from the list using a random number table. What method of sampling method is this?
 - (A) Quota sampling
 - (B) Simple random sampling
 - (C) Systematic sampling
 - (D) Cluster sampling
2. Identify the type of sampling technique "In a recent research that was conducted in a private school, the subjects of the study were selected by using the Table of Random Numbers."
 - (A) Simple Random Sampling
 - (B) Systematic Sampling
 - (C) Stratified Sampling
 - (D) Cluster Sampling
3. This helps to collect data from participants.
 - (A) Research approach
 - (B) Research instruments
 - (C) Research design
 - (D) None of above
4. What does "Get Data" in Power BI Desktop allow you to do?
 - (A) Transform data into visualizations
 - (B) Connect to various data sources
 - (C) Share dashboards
 - (D) Apply data security rules
5. Which of the following best describes the role of PMA 5 in a laboratory setting?
 - (A) It is used for data visualization
 - (B) It is a tool for sample storage
 - (C) It assists in data acquisition
 - (D) It is a device for temperature control
6. The first step in research.
 - (A) Citing the documents
 - (B) Copying sources
 - (C) Listing the sources
 - (D) Gathering sources
7. If you ask customers at a restaurant if pizza should be added to the menu, what kind of data collection is this?
 - (A) Census
 - (B) Sample Survey
 - (C) Experiment
 - (D) Observational Study
8. How many data acquisition formats are there that investigators can use to gather data?
 - (A) 4
 - (B) 2
 - (C) 3
 - (D) Many
9. The city planner needs recommendations on improving city streets. She divides up the city into districts by location. She then randomly selects 5 districts and polls every home in those 5 districts. This is an example of:
 - (A) Simple Random Sample
 - (B) Stratified Random Sample
 - (C) Cluster Random Sample
 - (D) Systematic Random Sampling
10. What is data acquisition in computer forensics?
 - (A) The process of deleting data
 - (B) The process of copying data
 - (C) The process of analyzing data
 - (D) The process of storing data
11. Of the 141 companies on the list, Jason chose to survey only 75 of them. He sent surveys to both small as well as large companies. If Jason selected survey recipients randomly from two mutually exclusive groups comprised of

- small and large companies respectively, he most likely used a ____
- (A) Simple random sample
 - (B) Judgment sample
 - (C) Convenience sample
 - (D) Stratified random sample
 - (E) Quota sample
12. What is a common method for gathering primary data?
- (A) Experimentation
 - (B) Survey
 - (C) Observation
 - (D) Case Study
13. Technique which gives every items of the universe an equal chance of being selected is
- (A) Convenient sampling
 - (B) Random Sampling
 - (C) Judgement sampling
 - (D) Non-random sampling
14. How does data acquisition work in a SCADA system?
- (A) Data acquisition in a SCADA system involves collecting data from field devices, processing it through RTUs or PLCs, and transmitting it to the SCADA master station for monitoring.
 - (B) Data acquisition in a SCADA system only involves manual data entry.
 - (C) SCADA systems do not process data; they only display it.
 - (D) Data is collected solely through user input without any field devices.
15. State the definition of a Data Acquisition System
- (A) Boots the signal
 - (B) Remove noise
 - (C) Accepts data as input.
 - (D) System used for data processing, conversion and transmission
16. To know what web sites and advertisements visitors see, sports and event e-marketers would check
- (A) Textfiles
 - (B) Clickstream Data
 - (C) Internet Service Providers
 - (D) Direct Delivery Systems
17. Tracey chooses 1,000 people to be in her study about the personalities of youngest children.
- (A) Random Assignment
 - (B) Random Sampling
18. What combination of methods does Safeena Husain's 'Educate Girls' organization use to identify and enrol out-of-school girls?
- (A) Partnering exclusively with private schools and corporate sponsors.
 - (B) Hosting national media campaigns and offering scholarships.
 - (C) Using smartphone apps with digital maps and conducting door-to-door surveys.
 - (D) Lobbying for policy changes and providing school lunch programmes.
19. Which type of sampling technique does not rely on random sampling of the target population but rather upon the researcher's subjective judgment about how the sample should be structured?
- (A) Non-probability sampling
 - (B) Probability sampling
 - (C) Snowball sampling
 - (D) Convenience sampling
20. If you want to know how students judge their own behaviour, which of the following data collection technique should you pick?
- (A) Naturalistic observation
 - (B) Systematic observation
 - (C) Surveys/Questionnaires
 - (D) Archival data
21. To find out what the preferred ice cream flavor is, waiting outside an ice cream parlor and asking everyone leaving the store to name his or

- her favorite flavor until you get 25 responses is an example of ____
- (A) Convenience Sample
 - (B) Simple Random Sample
 - (C) Stratified Random Sample
 - (D) Systematic Sample
22. The process of copying data is known as:
- (A) Data acquisition
 - (B) Data analysis
 - (C) Data documentation
 - (D) Data recovery
23. When participants who arrive for a research study are put into treatment groups on the basis of chance,
- (A) Random sampling has occurred.
 - (B) Random assignment has occurred.
 - (C) The statistical conclusions will also be absolutely correct.
 - (D) The research findings will be compromised because you should never randomly assign to groups.
24. Which type of research involves gathering and analyzing existing information previously collected by the same organization?
- (A) External Secondary Research
 - (B) Quantitative Primary Research
 - (C) Internal Secondary Research
 - (D) Qualitative Primary Research
25. Data acquisition is the process of ____ or obtaining control of data and adding it to a collection of evidence
- (A) Imaging
 - (B) Copying
 - (C) Backup
 - (D) Restoring
26. Which of the following is a key function of a data acquisition system (DAS)?
- (A) Data capture and conversion
 - (B) Data deletion
 - (C) Reducing network security
 - (D) Minimizing data redundancy
27. You must survey 100 students at your university. How would you pick the students using Stratified Random Sampling?
- (A) Pick 100 students randomly from a list of all students at university
 - (B) Randomly pick 10 faculties and randomly choose 10 students from each faculty
 - (C) Find the demographics of students (60% female, 40% male) and randomly pick 60 girls and 40 boys
 - (D) Send out an email to all students asking for 100 volunteers
28. To determine the average reading level of third grade students in the school district, 20 students at all the local elementary schools are tested.
- (A) Random sampling
 - (B) Systematic sampling
 - (C) Convenience sampling
 - (D) Stratified sampling
 - (E) Cluster sampling
29. Barcode function ____
- (A) As a means of automatic data packets
 - (B) As a means of automatically outputting data
 - (C) As a means of automatic data input
 - (D) As a means of automatic data input and output
30. What are the three main types of equipment used for data acquisition at Wayne Manufacturing?
- (A) Computers
 - (B) Printers
 - (C) Routers
 - (D) Sensors, data loggers, PLCs
31. Using quantitative and qualitative samples obtained from different levels of population under study. For study on reading and attitudes, use students for Quantitative phase, and teachers/parents for the Qualitative phase
- (A) Identical
 - (B) Parallel

- (C) Nested
(D) Multilevel
32. What feature would be used to collect how many times users downloaded a product catalog?
(A) 1.Custom Report
(B) 2.Event Tracking
(C) 3.Calculated Metrics
(D) 4.Custom Dimension
33. True or false: live acquisition can file meta-data, like date and time values.
(A) True
(B) False
34. Researchers compare the differences and similarities of among different people in different age groups at a given time.
(A) Testing Method
(B) Case-Study Method
(C) Longitudinal Method
(D) Cross-Sectional Method
35. The fundamental purpose of a ____ system is the exchange of data between two parties
(A) Source
(B) Destination
(C) Communication
(D) Satellite
36. What is data integration for?
(A) To make people life integrated
(B) To make predictions about future events
(C) To combine data from multiple sources
(D) To find patterns and insights
37. A random selection of people are called every morning for a week to determine if television shows are too violent. What type of data collection method is this?
(A) Census
(B) Sample Survey
(C) Experiment
(D) Observational Study
38. This is a tool that researchers use to collect needed data.
(A) Statistical Instrument
(B) Statistical Measurement
(C) Statistical Diagram
(D) None of above
39. What is the first step in the process of digital analytics?
(A) Configuration
(B) Processing
(C) Collection
(D) Reporting
40. Data acquisition system is mainly classified into ____
(A) 2 types
(B) 4 types
(C) 6 types
(D) 8 types
41. A data acquisition system provides ____
(A) Partial communication
(B) Ineffective communication
(C) Effective communication
(D) Complete communication
42. What method involves observing how long customers spend in different sections of a store without interacting with them?
(A) Survey Research
(B) Experimental Research
(C) Focus Groups
(D) Observational Research
43. In digital forensics, what does 'data acquisition' refer to?
(A) The process of learning new skills
(B) The method of collecting digital evidence
(C) The action of permanently deleting files
(D) The technique of encrypting data

44. Participants who exhibit the “most common” occurrence are sampled accordingly
- (A) Convenience Sampling
 - (B) Cluster Sampling
 - (C) Modal Instance Sampling
 - (D) None of above
45. Researchers were interested to know whether internal vehicle temperatures vary by outside temperatures. To evaluate this, temperature rise was measured continuously over a 60-minute period in a dark SUV on 16 different clear, sunny days with outside temperatures ranging from 72°F to 96°F. The researchers’ method of analysis is best described as:
- (A) A census.
 - (B) A survey.
 - (C) An observational study.
 - (D) An experiment.
46. — is any systematic procedure for collecting information that can be used to make inferences about the characteristics of people.
- (A) Appraisal
 - (B) Assessment
 - (C) Evaluation
 - (D) Measurement
47. What role do automatic identification systems play in data acquisition?
- (A) They are primarily used for data storage.
 - (B) Automatic identification systems enhance data acquisition by providing real-time, accurate identification and tracking of objects.
 - (C) They only work in controlled environments.
 - (D) They reduce the need for manual data entry.
48. These guidelines on data collection and validation of basic education statistics and submission in the systems (LIS and BEIS) shall serve as guide to who?
- (A) Regional Offices
 - (B) Public and Private Schools
 - (C) Schools Division Offices
 - (D) All of the above
49. Which research activity is occurring when a researcher assigns numerical scores to achievement tests by adding up the total number of correct answers?
- (A) Statistical analysis
 - (B) Triangulation of qualitative research data
 - (C) Questionnaire construction
 - (D) Measurement
50. To test the effects of breakfast on grades I ask my students if they ate breakfast and then compare the breakfast eaters grades to the non-breakfast eaters. This is an example of:
- (A) Observational study
 - (B) Experiment
51. Which type of acquisition runs on the recorded information as logs, image copies of evidence?
- (A) Null acquisition
 - (B) Complete acquisition
 - (C) Static acquisition
 - (D) Live acquisition
52. Query in Analytics can be created using
- (A) JAVA
 - (B) PYTHON
 - (C) SQL
 - (D) VBA
53. Data acquisition systems are not widely used.
- (A) True
 - (B) False
54. In a large biology lecture, you randomly select 25 students and keep track of their attendance throughout one semester. When the semester ends, you record their grades from the list posted at the front of the classroom.
- (A) Observational
 - (B) Experimental
 - (C) Survey
 - (D) None of above

55. If a company wants to know which TV channels their target audience watches, which type of research should they conduct?
- (A) Product Research
 - (B) Media Research
 - (C) Focus Groups
 - (D) Demographic Research
56. A sampling which the subjects are chosen based on their availability or the purpose of the study, and in some cases, on the sole discretion of the researcher.
- (A) Non-Probability
 - (B) Non-Probability Sampling
 - (C) Probability Sampling
 - (D) Probability
57. The process of collecting data or information is through ____
- (A) School profiles
 - (B) Information systems
 - (C) Registry of learners
 - (D) Governance
58. This shows which people will participate in the study.
- (A) Research instruments
 - (B) Sampling procedure
 - (C) Research respondents
 - (D) Statistical treatment
59. A company is trying to understand why a new product failed in the market. Which combination of research methods would provide the most comprehensive understanding?
- (A) Product Research and Attitude Research
 - (B) Only Media Research
 - (C) Only Demographic Research
 - (D) Only Geographic Research
60. Which of the following is NOT a type of data acquisition?
- (A) Dynamic Acquisition
 - (B) Physical Acquisition
 - (C) Live Acquisition
 - (D) Static Acquisition
61. Static Data Acquisition is the gathering of data that remains unaltered even if the system is powered off.
- (A) True
 - (B) False
62. The second step of Action Research is ____
- (A) Collection and organization of data
 - (B) Identification of problem area
 - (C) Interpreting data
 - (D) Actions based on data
 - (E) Evaluating results
63. A researcher wants to study the future of the Congress-I in India. For the study which tool is most appropriate for him?
- (A) Interview
 - (B) Schedule
 - (C) Rating scale
 - (D) Questionnaire
64. Multichannel data acquisition system has ____
- (A) Multiple channels
 - (B) Single channel
 - (C) Two channels
 - (D) Five channels
65. If a marketing researcher chooses to use word associations, the researcher is using ____ questions.
- (A) Closed-end
 - (B) Likert scale
 - (C) Open-end
 - (D) Rating scale
 - (E) Semantic differential
66. What term describes the process of gathering information from various materials such as books, articles, or websites for a report?
- (A) Plagiarism
 - (B) MLA Style
 - (C) Research
 - (D) Table of Contents

67. Copy (data) from one computer system to another, typically over the Internet
(A) Server
(B) Intranet
(C) Internet
(D) Download
68. Researcher intends to ascertain the attitude of adolescents towards modernization, which one of the following tools is an appropriate one?
(A) Likert Scale.
(B) Interview.
(C) Sociometry.
(D) Projective Technique.
69. A sociologist who decides to research the prevalence of teenage pregnancy across various generations in a society is pursuing
(A) A case study
(B) An in-depth study
(C) A longitudinal study
(D) A cross-sectional study
70. Which of the following research methods is an appropriate way to gather marketing information when quick responsiveness and low costs are important issues?
(A) Face-to-face interviews
(B) Test marketing
(C) Internet survey
(D) Field experiment
71. Which of the following cannot be considered as data in Data Acquisition System (DAQ)?
(A) Temperature
(B) Mechanical displacement
(C) Flow rate
(D) None of the above

1.1.11 Survey Data

1. How many students took the survey?
(A) 32
(B) 47
(C) 53
(D) 56
2. How many students were involved in this survey of choosing their favourite colours?
(A) 100
(B) 40
(C) 20
(D) 10
3. Mrs. Robinson asks the students to complete a survey about Imptime by placing the survey in Blackboard. This type of sampling is called?
(A) Simple
(B) Systematic
(C) Stratified
(D) Voluntary
(E) Convenience
4. National Achievement Survey 2017 is the largest ever national assessment survey in ____
(A) India
(B) Asia
(C) Asia Pacific
(D) World
5. On one day at the mall, Dr. Miele conducted a survey that measured the eating habits of people who were 20, 30, 40 and 50, with 10 people in each group. The study was attempting to determine if a high protein diet led to increased muscle mass. Which of the following best describes her study?
(A) An experiment
(B) A cross-sectional study
(C) A case study
(D) A longitudinal study
(E) A double-blind study
6. People were surveyed about their favourite ice cream. How many chose Vanilla?
(A) 20 people

- (B) 50 people
(C) 60 people
(D) 100
7. How many customers participated in the survey?
(A) 94
(B) 93
(C) 95
(D) 96
(E) 97
8. How many people participate in the survey "Favorite types of movie"?
(A) 75
(B) 78
(C) 99
(D) 101
9. A recent survey of 800 seventh graders from across the state shows 4 out of 10 like to play paper football. How many students said they like to play paper football?
(A) 40 students
(B) 200 students
(C) 320 students
(D) 8,000 students
10. Which question is best suited for a statistical investigation?
(A) How tall is the tallest student at Parker Middle School?
(B) How tall is the shortest student at Parker Middle School?
(C) How tall are the students at Parker Middle School?
(D) How tall is the oldest student at Parker Middle School?
11. Ms. Stringer conducted a survey of his 9th grader homeroom. 17 students are taking both Econ and Business. 19 students are only taking Econ. 18 students are only taking Business. 16 students are taking other courses. Construct Venn Diagram. Which one of the followings is correct for the given Venn picture.
(A) I = 16, ii = 17, iii = 18. iv = 19
(B) I = 19, ii = 18, iii = 17. iv = 16
(C) I = 19, ii = 17, iii = 18. iv = 16
(D) I = 16, ii = 18, iii = 17. iv = 19
12. How many students were surveyed to collect this data?
(A) 11
(B) 13
(C) 15
(D) 17
13. How many children participated in the survey?
(A) 34
(B) 30
(C) 32
(D) 6
14. How many students were interviewed in this survey?
(A) 1 student
(B) 5 students
(C) 7 students
(D) 8 students
15. How many people were surveyed to collect this data?
(A) 18
(B) 20
(C) 22
(D) 24
16. Hunter and Cole took a survey of how many students like science class. If 480 students said they like science class, and they surveyed 500 students, what percent do not like science class?
(A) 4%
(B) 14%
(C) 40%
(D) 96%

17. Gia took a survey of her classmates. She asked, "What is your favorite summer activity?" She received the following responses. How many classmates chose activities that must be done outdoors?
- (A) 13
 - (B) 17
 - (C) 6
 - (D) 3
18. Which of the following is a method used to collect data by asking people questions directly?
- (A) Focus Groups
 - (B) Surveys
 - (C) Product Research
 - (D) Media Research
19. Based on this graph, how many people were surveyed?
- (A) 24 people
 - (B) 22 people
 - (C) 1,050 people
 - (D) 23 people
20. How many people voted in the survey about favorite colors?
- (A) 2 people
 - (B) 8 people
 - (C) 10 people
 - (D) 15 people
21. What happens if surveys only include "easy-to-reach" people?
- (A) High accuracy
 - (B) Sampling bias
 - (C) More honesty
 - (D) Lower response bias
22. The organization has carried out a survey with — people.
- (A) Three hundred
 - (B) Three hundreds
23. How many students responded to the survey about brushing their teeth?
- (A) 5 students
 - (B) 7 students
 - (C) 15 students
 - (D) 16 students

1.2 Data Representation

1.2.1 Tabular Representation of Data

1. A — is a grid with labeled columns and rows.
- (A) Dialog box.
 - (B) Worksheet.
 - (C) Clipboard.
 - (D) Toolbar.
2. What is the simplest method of presenting data in scientific research?
- (A) Graphical
 - (B) Pictograph
 - (C) Tabular
 - (D) Textual
3. This type of text feature organizes information.
- (A) Table
 - (B) Photograph
 - (C) Cutaway
 - (D) Diagram
4. The main objective of tabulation is:
- (A) Increase the size of data
 - (B) Minimize data
 - (C) Present data systematically
 - (D) Hide information
5. In tabular data, what does a row and column represent?
- (A) Row = feature, column = entity
 - (B) Column = feature, row = entity

6. The line that surrounds every cell in your table is called a:
- (A) Grid.
 - (B) Marker.
 - (C) Divider.
 - (D) Border.
7. True or False: In a qualitative data table, it is a good idea to arrange the categories in order by descending frequency, except for "other" and "none."
- (A) True
 - (B) False
8. Tabulation of data means:
- (A) Classifying and presenting data in tables
 - (B) Collecting raw data
 - (C) Writing narrative
 - (D) Hypothesis testing

1.2.2 Table Chart

1. Which of the following is an example of a 'table' in data representation?
- (A) A list of items
 - (B) A chart with rows and columns
 - (C) A paragraph of text
 - (D) A single line of code
2. Each rectangular box in a table is called:
- (A) A cell.
 - (B) A row.
 - (C) A column.
 - (D) A spreadsheet.
3. What does merging cells in a table do?
- (A) Resizes the cells
 - (B) Deletes the cell contents
 - (C) Splits cells into multiple columns or rows
 - (D) Combines two or more cells into one
4. A well-formatted table or chart will be easy for your audience to understand.
- (A) TRUE
 - (B) FALSE
5. A(n) ____ is a set of data arranged in rows and columns.
- (A) Function
 - (B) Table
 - (C) Graph
 - (D) Relation

1.2.3 Frequency Distribution

1. Describe the peak of the distribution.
- (A) There is no peak of the distribution.
 - (B) There is a peak at 16
 - (C) There is a peak at 16, 18, and 20.
 - (D) There is a peak at 20.
2. The table above shows a cumulative frequency distribution of runners' ages. According to the table, how many runners are in their forties?
- (A) 25
 - (B) 7
 - (C) 10
 - (D) 6
3. How many students had a score between 43 to 48 points?
- (A) 4 students had a score between 43 to 48 points.
 - (B) 6 students had a score between 43 to 48 points.
 - (C) 8 students had a score between 43 to 48 points.
 - (D) 7 students had a score between 43 to 48 points.
4. Select the true statement.
- (A) There is a cluster of data between 0 and 2
 - (B) There is a gap at 7
 - (C) There is an outlier at 8

- (D) The distribution is clearly skewed left
5. What was the most common score interval?
- (A) 20-30
 - (B) 40-50
 - (C) 50-60
 - (D) 60-70
 - (E) 90-100
6. In which interval would the median fall?
- (A) 70-79
 - (B) 80-89
 - (C) 90-99
 - (D) None of above
7. The temperature in Alaska was 43 on Monday, 50 on Tuesday, and 50 on Wed, What is the mode of the data?
- (A) 50
 - (B) 55
 - (C) 43
 - (D) None of above
8. The sum of the relative frequencies for all classes will always equal
- (A) The sample size.
 - (B) The number of classes.
 - (C) One.
 - (D) Any value larger than one.
9. Average value of the upper and lower limits:
- (A) Class interval
 - (B) Class
 - (C) Mid-value
 - (D) Class Limits
10. The frequency table shows the colors that fifth graders preferred for their school shirts. Based on the data in the table, how many students preferred the three colors that had the highest frequencies?
- (A) 38
 - (B) 91
 - (C) 147
 - (D) 105
11. In case of inclusive method:
- (A) Upper limit of class interval is excluded
 - (B) Lower limit of class is excluded
 - (C) Both upper limit and lower limit are included
 - (D) Both upper and lower limit are excluded
12. Which row of the frequency table is incomplete?
- (A) The row showing 0 to 4 books
 - (B) The row showing 5 to 9 books
 - (C) The row showing 10 to 14 books
 - (D) The row showing 15 to 19 books
13. According to the Acme Corporation Salary Distribution, how many employees make at least \$77,000?
- (A) 100
 - (B) 275
 - (C) 350
 - (D) 450
14. According to the portion of the frequency table given, how many people have an MBA?
- (A) 9
 - (B) 60
 - (C) 20
 - (D) Not enough information
15. This is the interval between two consecutive upper (or lower) class limits.
- (A) Class width
 - (B) Class boundaries
 - (C) Midpoints
 - (D) Frequency
16. Which of the following is the correct formula to find class width?
- (A) $(\text{max}-\text{min})/(\# \text{ of classes})$, round up to the next integer
 - (B) $(\text{max}-\text{min})/2$, round up to the next integer
 - (C) $(\text{max}-\text{min})/(\# \text{ of classes})$, round normally
 - (D) $(\text{max}+\text{min})/2$, round normally
 - (E) $(\text{max}-\text{min})/(\text{number of data})$, round up to the next integer

17. What is the cumulative frequency for the class that had 3 days with rain?
(A) 12
(B) 15
(C) 5
(D) 17
18. Observe the frequency distribution: How many classes are there?
(A) 6
(B) 30
(C) 1-5
(D) 1-30
19. The Histogram, Frequency Polygon and Ogive are all graphs for this data type:
(A) Univariate qualitative
(B) Univariate quantitative
(C) Multivariate qualitative
(D) Multivariate quantitative
20. What is the cumulative relative frequency for the class of people who drink 12-15 cups of coffee?
(A) 11%
(B) 28%
(C) 72%
(D) 89%
21. According to the frequency table, how many more Cats were sold than Birds?
(A) 25
(B) 10
(C) 15
(D) 20
22. Approximate the greatest relative frequency.
(A) 0.03
(B) 0.15
(C) 0.25
(D) 0.35
23. What is the first number in the cumulative frequency column?
(A) 12
(B) 30
(C) 8
(D) 20
24. What is the class width of the data?
(A) 2
(B) 3
(C) 4
(D) 5
25. How many more individuals scored between 80-119 than from 40-79?
(A) 8 people
(B) 7 people
(C) 12 people
(D) 5 people
26. In the process of constructing a frequency table, we get the following information. Largest value is 59, smallest value is 40 and the number of classes desired is 5. The class interval is —
(A) 20
(B) 25
(C) 15
(D) 4
27. What was the most common amount of time that students spent doing homework?
(A) 30-60 minutes
(B) 60-90 minutes
(C) 90-120 minutes
(D) 120-150 minutes
28. If the first class in a frequency table is 5-10, what is the class width?
(A) 5
(B) 6
(C) 7
(D) 8
29. Univariate frequency is also known as one way frequency distribution
(A) True
(B) False

30. What was the range of heights for the least amount of people?
(A) 135-140 cm
(B) 160-164 cm
(C) 135-139 cm
(D) 160-165 cm
31. Identify the class with the highest relative frequency.
(A) 95-105
(B) 105-115
(C) 115-125
(D) 125-135
32. What range occurs most frequently?
(A) 5-9
(B) 10-14
(C) 15-19
(D) 20-24
33. Hector has a collection of postcards. The frequency table shows the number of postcards he has from each country. The number of postcards from the United States is 3 times the number he has from which country?
(A) Japan
(B) Norway
(C) France
(D) Canada
34. Sam had 15 soccer games this season. His team scored the following goals for each game: 1,2,0,3,1,1,0,2,1,3,0,2,1,1,3. What is the frequency of Sam's team scoring 0 goals?
(A) 15
(B) 6
(C) 3
(D) 4
35. If the library wants to display the most checked-out day, which day would that be based on your frequency table?
(A) Wednesday
(B) Saturday
(C) Friday
(D) Monday
36. What would be the cumulative frequency for the third class?
(A) 5
(B) 12
(C) 17
(D) 18
37. Which age group represents the mode?
(A) 40-49
(B) 50-59
(C) 60-69
(D) 70-79
(E) 80-89
38. According to the Acme Corporation Salary Distribution, there are more people making between \$44,000-\$54,000 than any other singular pay scale interval.
(A) True
(B) False
39. Find the midpoints.
(A) 25.5, 35.5, 45.5, 55.5, 65.5, 75.5
(B) 20.5, 30.5, 40.5, 50.5, 60.5, 70.5, 80.5
(C) 21, 31, 41, 51, 61, 71
(D) 30, 40, 50, 60, 70, 80
40. How many people were between 145-149 cm tall?
(A) 6
(B) 6 cm
(C) 6 people
(D) None of above
41. Class mark =
(A) $\text{Upper limit} - \text{lower limit} / 2$
(B) $\text{Upper limit} + \text{lower limit} / 2$
(C) None
(D) None of above
42. Which score has the greatest frequency?
(A) 1
(B) 2
(C) 3
(D) 4

43. How many minutes did the most number of people study?
- (A) 61-90
(B) 0-30
(C) 31-60
(D) 91-120
44. The class midpoint is equal to:
- (A) The average of the upper class limit and the lower class limit
(B) The product of upper class limit and the lower class limit
(C) The ratio of the upper class limit and the lower class limit
(D) None of these
45. Base on the presented table, what is the cumulative frequency for Class 11-15?
- (A) 5
(B) 7
(C) 9
(D) 10
46. What is the cumulative frequency of the 3rd class in this distribution?
- (A) 1
(B) 14
(C) 15
(D) 24
47. How many students scored between 76 and 80 on their math test?
- (A) 2
(B) 3
(C) 4
(D) 5
48. Tally marks determines
- (A) Class width
(B) Class boundary
(C) Class limit
(D) Class frequency
49. How do you calculate frequency density?
- (A) $\frac{\text{frequency}}{\text{class width}}$
(B) $\frac{\text{class width}}{\text{frequency}}$
(C) $\text{frequency} \times \text{class width}$
(D) None of above
50. The frequency table shows the colors that fifth graders preferred for their field day shirts. Based on the data in the table, how many students preferred blue and orange?
- (A) 60
(B) 56
(C) 59
(D) 53
51. If the limits for a class were 20-38, the boundaries would be 19.5-37.5.
- (A) True
(B) False
52. Describe the shape of the frequency distribution.
- (A) Symmetric
(B) Uniform
(C) Bimodal
(D) Left Skewed
(E) Right Skewed
53. A florist recorded the number and cost of flower bouquets that were sold daily and recorded the data below. What is the frequency of a bouquet that cost at least \$40?
- (A) 2
(B) 15
(C) 22
(D) 37
54. Frequency array is also called
- (A) Discrete series
(B) Individual series
(C) Continuous series
(D) Arithmetic mean

55. Which frequency table represents the number of students who chose each color based on the following information: 6 students chose red, 2 students chose yellow, 5 more students chose blue than yellow, 3 fewer students chose purple than red, and the rest chose green?
- (A) Table A
(B) Table B
(C) Table C
(D) Table D
56. What is the upper class boundary for the class 23-35?
- (A) 35
(B) 34.5
(C) 35.5
(D) 22.5
(E) 23.5
57. Describe the gaps in the distribution.
- (A) There are no gaps in the data.
(B) There is a gap at 2.7
(C) There is a gap at 2.1
(D) None of above
58. There can be more than one mode
- (A) True
(B) False
59. What is the missing number in the cumulative frequency column?
- (A) 19
(B) 9
(C) 15
(D) 22
60. The frequency diagram shows the height of fifty students. How many students are between 1.3 and 1.5 metres tall?
- (A) 32
(B) 33
(C) 34
(D) 35
61. Where is the peak/mode of the data?
- (A) 0-499
(B) 1000-1499
(C) 2000-2499
(D) 2500-2999
62. What range of scores had the most students
- (A) 5-9 points
(B) 20-24 points
(C) 30-34 points
(D) 35-39 points
63. If the following frequency table was put into a dot plot, how many dots will be above 6?
- (A) 4
(B) 7
(C) 2
(D) 5
64. Which interval contained the fewest scores?
- (A) 0-9
(B) 50-59
(C) Both 0-9 and 50-59
(D) 10-19
65. How many people (frequency) got a score of 7?
- (A) 200
(B) 150
(C) 100
(D) 50
66. The horizontal axis of a frequency polygon comes from this column:
- (A) Class
(B) Frequency
(C) Midpoint
(D) Cumulative Frequency
(E) Class Endpoints
67. The frequency distribution according to individual variate values is called:
- (A) Discrete frequency distribution
(B) Cumulative frequency distribution
(C) Percentage frequency distribution
(D) Continuous frequency distribution

68. The y-axis represents
(A) Frequency
(B) Salary
(C) Median
(D) IQR
69. This is the data gathered from Non-Fiction books in our media center. Select the true statement about the distribution.
(A) The data is symmetrical.
(B) The data is skewed left.
(C) The data is skewed right.
(D) The data is bell-shaped.
70. Which range of student scores occurred least frequently?
(A) 0-9
(B) 10-19
(C) 30-39
(D) 40-49
71. Observe the frequency distribution: What is the relative frequency of the first class?
(A) 0.139 or 13.9%
(B) 0.5 or 5%
(C) 1-5
(D) 5
72. For which intervals are there peaks in the data distribution?
(A) 0-4
(B) 0-4, 2-24
(C) 10-14
(D) 0-4, 5-19
73. What is the RANGE of a data set?
(A) The middle value
(B) The number that occurs most frequently
(C) The average
(D) The difference between the max and min values
74. Which frequency table represents all of the data in the list: 3, 1, 5, 0, 3, 3, 3, 1, 3?
(A) Table F
(B) Table G
(C) Table H
(D) Table J
75. What is the frequency of the most common shoe size in the example?
(A) 6
(B) 5
(C) 7
(D) 8
76. Which interval has a frequency of 50?
(A) 6-7
(B) 7-8
(C) 8-9
(D) 9-10
77. In which interval is there a gap in the data?
(A) 61-65
(B) 66-70
(C) 81-85
(D) 86-90
78. Find the cumulative frequencies.
(A) 28, 56, 84, 100
(B) 28, 58, 70, 72, 74, 76
(C) 33%, 37%, 20%, 7%, 7%, 7%
(D) 28, 30, 12, 2, 2, 2
79. Which of the following is NOT a characteristic of a frequency table?
(A) It shows the frequency of each value in a data set.
(B) It can be used to create bar charts.
(C) It shows the cumulative frequency of values.
(D) It helps in identifying the mode of the data set.

1.2.4 Graphical Representation of Data

1. What is the primary purpose of the Matplotlib library?
(A) Data analysis
(B) Creating static, animated, and interactive 2D plots
(C) Web development
(D) Creating 3D plots
2. Nora, Mia, and Samuel are running a lemonade stand over the summer. They want to visualize their cumulative earnings over time. Which type of chart would be most effective for this?
(A) Line chart
(B) Area chart
(C) Pie chart
(D) Scatter plot
3. In the chart, a music store listed the number of CDs sold each month for 6 months. Which graph correctly represents the information in the chart?
(A)
(B)
(C)
(D)
4. X-axis is also called ____
(A) Horizontal axis
(B) Vertical axis
5. The pictogram shows the number of hours of sunshine in one day. Which city had the most sunshine?
(A) Paris
(B) Cork
(C) London
(D) Swansea
6. What information appears most commonly on the horizontal axis?
(A) Quantities
(B) Data series headings or time frames
(C) Data series color definitions
(D) Titles
7. On a graph the "Y" axis is represented by
(A) Horizontal Line (back and forth line)
(B) Vertical line (up and down line)
(C) Slanted line
(D) Variable constant
8. In a column chart is it possible to change the chart colors?
(A) Yes
(B) No
9. What is the main purpose of a chart in a text?
(A) To provide detailed explanations
(B) To visually represent data
(C) To entertain the reader
(D) To confuse the reader
10. What is the purpose of the 'Switch Row/Column' option in Excel 2019 charts?
(A) To change the color scheme of the chart
(B) To switch the data series from rows to columns or vice versa
(C) To add a new data source to the chart
(D) To delete the chart entirely
11. The students in a class were each given a set of letters and asked to make words. The dot plot shows the number of students who made from 1 to 7 words. What fraction of the students in the class made 5 or more words?
(A) $\frac{1}{20}$
(B) $\frac{1}{4}$
(C) $\frac{3}{10}$
(D) $\frac{3}{4}$
12. What is graphed on the X-axis of a graph?
(A) Independent Variable
(B) Dependent Variable
(C) Controlled Variables
(D) Quantity variable
13. What is a graph?
(A) A picture that shows data
(B) Shows when events happened

14. How many students are represented on the graph?
(A) 50
(B) 11
(C) 100
(D) 22
15. What is the horizontal axis on a graph often called?
(A) X-axis
(B) Z-axis
(C) W-axis
(D) Y-axis
16. How does this graph measure rainfall?
(A) Months
(B) Inches
(C) Millimeters (mm)
(D) Time months
17. The axis that goes from left to right is the
(A) Y axis
(B) X axis
18. If a pictograph shows 4 pictures for dogs, 3 for cats, and 2 for birds, how many total pets are represented in the pictograph?
(A) 9
(B) 7
(C) 10
(D) 5
19. What is the purpose of formatting a chart in a spreadsheet?
(A) To make the chart more confusing and difficult to understand.
(B) To hide important information and make the chart less informative.
(C) To decrease the visual appeal and readability of the chart.
(D) To enhance visual appearance and improve readability.
20. Information visualisation interfaces are designed to:
(A) Display data in a textual format
(B) Present data graphically to enhance understanding
(C) Use voice commands for data input
(D) Simulate virtual environments
21. A conceptual framework can be represented by:
(A) Only text without any visuals
(B) Charts or diagrams that outline relationships between variables
(C) The results section of a study
(D) A list of all research methods used
22. What is the difference between a line graph and a bar chart?
(A) A line graph shows trends over time, while a bar chart compares different categories.
(B) A line graph uses bars to show data, while a bar chart uses lines.
(C) A line graph is used for pie charts, while a bar chart is for scatter plots.
(D) A line graph displays static data, while a bar chart shows dynamic changes.
23. On a graph the "X" axis represents
(A) Vertical line (up and down line)
(B) Horizontal line (back and forth line)
(C) Slanted line
(D) Constant variable
24. The other name for the vertical plane in Ogives, Line Graphs and Histograms
(A) Y-Axis
(B) X-Axis
(C) Z-Axis
(D) A-Axis
25. Is the graph pictured discrete or continuous?
(A) Discrete
(B) Continuous
26. What are the two axes on a graph called?
(A) A and B

- (B) C and D
(C) X and Y
(D) A and Z
27. A chart is to a spreadsheet as a picture is to a thousand words.
(A) True
(B) False
28. What is the main function of charts in data communications?
(A) Present data in tabular form
(B) Present data in graphical form
(C) Presenting data in narrative form
(D) Presenting data in the form of mathematical formulas
29. Which project management tool gives a graphic representation of the project's timeline?
(A) Stakeholder matrix.
(B) RACI matrix.
(C) Critical Path Analysis.
(D) Gantt chart.
30. Which of the following is true about data presentation in research reports?
(A) Figures should include all the data you present.
(B) Having too much information in one figure can be overwhelming to readers.
(C) Figures should never repeat information that is already in text form.
(D) Tables and figures should be avoided at all costs.
31. Which graph is used with pictures?
(A) Bar Graph
(B) Pictograph
(C) Tally Chart
(D) None of above
32. Imagine you're tasked with showcasing the quarterly revenue growth at the next board meeting. How would you personalize the revenue chart in PowerPoint to make it more engaging?
(A) By using the Chart Tools Design and Format tabs
(B) By using the Review tab
(C) By using the Insert tab
(D) By using the Animation tab
33. Which of the following sets of method can be used to represent categorical data?
(A) Line graph and tables
(B) Bar chart and pie charts
(C) Bar charts and line graphs
(D) Pie charts and line graphs
34. ____ is also described as five-number summary plot.
(A) Histogram
(B) Box plot
(C) Pie chart
(D) Scatter plot
35. The X axis
(A) Runs up and down
(B) Runs left to right
(C) Runs on a diagonal
(D) None of above
36. What do we use to pick the numbers for the scale?
(A) Whatever we want
(B) You must always count by tens
(C) Use your data to pick the scale
(D) You don't need a scale
37. The distances Clea biked weekly, in miles, are 49, 31, 36, 41, 28, 44, 23, 34, 32, 33, and 25. The stem-and-leaf plot shows some of the data. What are the leaves for stem 2?
(A) 1, 2, 3, 4, 6
(B) 3, 5, 8
(C) 2, 3, 5, 6
(D) 2, 3, 5, 8

38. Which axis runs vertically?
(A) X
(B) Y
39. What does the Chart Styles option under the Design tab in Excel 2019 allow you to do?
(A) Select the data source for the chart
(B) Change the text and data format in the chart
(C) Change the overall style of the chart
(D) Insert a new chart
40. The graphical or visual representation of information and data using visual elements like charts, graphs, etc are called ____
(A) Data visualization
(B) Pyplot
(C) Line chart
(D) Bar chart
41. Which of the following is not always a part of the graph?
(A) Horizontal and Vertical axes.
(B) Labels
(C) Average
(D) Title
42. Which one is the first step used to make a column chart?
(A) Highlight the Data table
(B) Click on Insert tab
43. Why might a bar graph be more useful than a data chart in some situations?
(A) It can hold more data than a chart
(B) It visually displays data, making it easier to interpret trends and comparisons
(C) It is more accurate than a data chart
(D) It requires less information to create
44. Bubble charts add which aesthetic?
(A) Shape
(B) Size
(C) Color
(D) Transparency
45. What is the main goal of data visualization in data science?
(A) To present data in a graphical format
(B) To store data efficiently
(C) To clean the data
(D) To increase data complexity
46. Which library is used for the data visualisation in Python?
(A) Pandas
(B) Matplotlib
(C) Random
(D) Statistics
47. Identify the text or graphic feature in the picture.
(A) Graph
(B) Bold print
(C) Illustration
(D) Photograph
48. The Creekview History Museum kept track of how many people visited the museum each day last month. This box plot shows the results. What was the upper quartile of the number of museum visitors?
(A) 100
(B) 400
(C) 350
(D) 300
49. If a car travels at a constant speed, what shape will its distance vs time graph be?
(A) A straight horizontal line
(B) A straight diagonal line
(C) A curved line
(D) A straight vertical line
50. Find the range of the data. Which display did you use?
(A) 7; box plot
(B) 10; histogram
(C) 2; box plot
(D) 7; histogram

51. Seaborn is used for
(A) Data Visualization
(B) Data Manipulation
(C) Model Evaluation
(D) Model Training
52. When creating a chart, what is the purpose of the chart title?
(A) To show the chart type
(B) To provide context about the data
(C) To indicate the source of the data
(D) To display the data values
53. What is the role of infographics?
(A) To provide audio content
(B) To represent data visually
(C) To create social media posts
(D) To write blogs
54. Which of the following is a typical application of D3 in social studies?
(A) Visualizing demographic data
(B) Encrypting social media data
(C) Sorting historical events
(D) Filtering political speeches
55. True or False: You can use a broken-axis symbol on the vertical axis of graphs of univariate data.
(A) True
(B) False
56. The part of the chart area that displays data.
(A) Legend
(B) Axis
(C) Series
(D) Plot Area
57. When choosing a scale for the vertical axis you should consider ____
(A) ____ the smallest value in your data.
(B) ____ the biggest value in your data.
58. This plot show the math test scores of Ms. Lasley's class. How many students score 70% or higher?
(A) 13
(B) 15
(C) 12
(D) 14
59. Sales are best presented through a ____ graph.
(A) Line
(B) Bar
(C) Circle
(D) Picture
60. What is the significance of the title in a data visualization?
(A) The title is used to hide the main message of the visualization.
(B) The title is irrelevant to the data presented.
(C) The title provides context and clarity, guiding the audience's understanding of the data visualization.
(D) The title only serves as a decorative element.
61. According to the graph, what sector is the greatest user of energy?
(A) Industry
(B) Commercial
(C) Transportation
(D) Residential
62. The two number lines are called the ____
(A) Origin
(B) Axes
(C) Quadrants
(D) Coordinates
63. Is this a GRAPH or a TABLE?
(A) Graph
(B) Table
64. The axis that goes up and down in a graph is the
(A) X axis
(B) Y axis

65. These are mini charts to provide visual representation of the data.
- (A) Goal Seek
 - (B) Consolidate
 - (C) Spark Lines
 - (D) Charts
66. What are the numbers on the y-axis called?
- (A) The numbers
 - (B) Values
 - (C) The focus
 - (D) None of above
67. The Y axis is ____?
- (A) Vertical (Standing Line)
 - (B) Horizontal
 - (C) Criss-cross
 - (D) Diagonal
68. Using the information from the graph, calculate the difference in weekly earnings of a person with some college and a person with no high school diploma.
- (A) \$246
 - (B) \$658
 - (C) \$1292
 - (D) \$699
69. What are the main advantages of using charts over tables?
- (A) Easier to read
 - (B) Has more details
 - (C) More suitable for qualitative data
 - (D) All answers are wrong
70. The X axis is ____?
- (A) Vertical
 - (B) Diagonal
 - (C) Criss-cross
 - (D) Horizontal (Sleeping line)
71. The dot plot shows the number of books 4th grade students read each month. How many students read 5 or more books?
- (A) 0 students
 - (B) 5 students
 - (C) 4 students
 - (D) 9 students
72. Look at the tally chart. Which item sold the most?
- (A) Hamburger
 - (B) Cheeseburger
 - (C) Onion Rings
 - (D) French Fries
73. What is the purpose of a secondary axis in an Excel chart?
- (A) To add more data series to the chart
 - (B) To make the chart title stand out
 - (C) To display a second set of data with a different scale
 - (D) To adjust the alignment of the data labels
74. Y-axis is also called ____
- (A) Horizontal axis
 - (B) Vertical axis
75. Which of the following statistical tools is appropriate when a researcher compares and analyzes a week of high temperature (in Fahrenheit) in two different seasons?
- (A) When displaying data to summarize statistical results
 - (B) When summarizing key studies found in the literature
 - (C) When presenting information in graphs or in visual pictures
 - (D) When presenting sample size, probability values & significance levels
76. The pictogram shows the number of burgers sold in a fast-food restaurant at lunch. Which was the most popular burger?
- (A) Chicken burger
 - (B) Fish burger
 - (C) Beef burger
 - (D) Vegetarian burger

77. The dot plot represents the test scores for a fifth grade science class. What is the difference between the largest and the smallest score made on the science test?
- (A) 5
(B) 15
(C) 10
(D) 3
78. What is the y-axis in this graph?
- (A) Student Membership (in millions)
(B) Year
(C) US Public School Student Membership
(D) None of above
79. Which axis runs horizontally?
- (A) X
(B) Y
80. What does the horizontal axis (x-axis) of an Excel chart represent?
- (A) Data series
(B) Category labels
(C) Legend
(D) Data points
81. Using color only to highlight anomalies is risky because:
- (A) It hides data
(B) Color perception varies among viewers
(C) It increases memory usage
(D) It distorts scales
82. Plots changes in data relative to a center point
- (A) Radar
(B) XY Scatter
(C) Stock
(D) Surface
83. Names used to identify parts of the graph.
- (A) Tick marks
(B) Grids
(C) Labels
(D) Legend
84. Choose the correct option.
- (A) Grid
(B) Pie chart
(C) Story board
(D) Table
85. According to the ogive, what is the approximate number of college students who were surveyed?
- (A) 80
(B) 100
(C) 120
(D) 350
86. Johnathan analyzed a set of data. He noticed that 50% of the data was between 84 and 89. He also noticed that 50% of the data was between 88 and 91. The lowest data point was an 82. Which box plot could represent the set of data Johnathan analyzed?
- (A)
(B)
(C)
(D)
87. What is the purpose of data visualization?
- (A) To hide data
(B) To present findings visually
(C) To summarize unrelated information
(D) To confuse the audience
88. Which year on the graph did Finland win 5 medals?
- (A) 1988
(B) 1992
(C) 1996
(D) 2000
89. Using red to highlight anomalies is an example of:
- (A) Color to represent values
(B) Color as a tool to distinguish
(C) Color as a tool to highlight
(D) None of above

90. Jeremy has a weekend job as a soccer referee. One weekend, he earns \$140 by working 4 games. Another weekend, he earns \$210 by working 6 games. If Jeremy graphed an equation that would represent his total earnings based on the number of games worked, what would be the slope of the graph?
- (A) 7
(B) 70
(C) 35
(D) 10
91. Which of the following format options should be used to display dollars on an axis?
- (A) Normal.
(B) Percentage.
(C) Currency.
(D) Comma.
92. What is the significance of Data Visualization in modern news reporting?
- (A) Using traditional print media only
(B) Presenting data in visual formats for better understanding
(C) Limiting access to online news sources
(D) Ignoring social media platforms
93. The x axis is the same as the
- (A) Horizontal axis
(B) Vertical axis
94. What type of relationship is shown in this graph?
- (A) Positive Relation
(B) Negative Relation
(C) No relation
(D) None of the above
95. Which two chart types are the most interchangeable?
- (A) Bar and Column
(B) Pie and Area
(C) Pie and Bar
(D) Line and Scatter
96. The tables shows the relationship between number of spiders and the number of legs. Which 4 numbers would complete the graph correctly?
- (A) 9, 10, 11, 12
(B) 9, 10, 12, 22
(C) 16, 24, 40, 80
(D) 16, 24, 35, 80
97. The part of a map or graph that explains the symbols
- (A) Vertical bar graph
(B) Scale
(C) Line plot
(D) Key
98. Which library is commonly used for creating plots in Python?
- (A) Matplotlib
(B) Pandas
(C) NumPy
(D) Seaborn
99. Overplotting in scatterplots can be reduced using:
- (A) More colors
(B) Transparency
(C) Bigger symbols
(D) Log scale
100. What type of chart is best for hierarchical data?
- (A) Matrix
(B) Tree Map
(C) Pie chart
(D) Line chart
101. Which type of data visualization should you use to represent a relationship between two continuous variables?
- (A) Bar graph
(B) Histogram
(C) Scatter plot
(D) Pie chart

- 102.** What is this graph missing?
- (A) Axes
 - (B) Title
 - (C) Categories
 - (D) None of these
- 103.** Pictures of the surface based on data from satellites are called
- (A) Satellite images
 - (B) Pixels
 - (C) Dots
 - (D) Maps
- 104.** Use the dot plot. How many more yellow and red lollipops than blue and green lollipops were pulled from the bag?
- (A) 7
 - (B) 3
 - (C) 4
 - (D) 6
- 105.** What is the purpose of naming X and Y axes in a graph?
- (A) To make the graph look more colorful.
 - (B) To confuse the reader about the data.
 - (C) To provide context and clarity about the data being represented.
 - (D) To fill space on the graph.
- 106.** What type of chart uses axes (horizontal and vertical lines) to organize and display data visually?
- (A) Table
 - (B) Graph
 - (C) Pie Chart
 - (D) Box and Whisker Plot
- 107.** In a cumulative frequency polygon, the cumulative frequency of each class is plotted against:
- (A) Mid-point
 - (B) Lower class boundary
 - (C) Upper class boundary
 - (D) Upper class limit
- 108.** What does a picture graph use to show data?
- (A) Pictures or symbols
 - (B) Numbers only
 - (C) Letters and words
 - (D) Long sentences
- 109.** Which of the following is NOT a major consideration for data visualization?
- (A) Clarity
 - (B) Accuracy
 - (C) Efficiency
 - (D) Robustness
- 110.** What is the least favourite fruit in this pictogram?
- (A) Apple
 - (B) Guava
 - (C) Grape
 - (D) Banana
- 111.** Which is the name of an interactive graphical representation of data that allows a user to change the groupings?
- (A) PivotChart
 - (B) PivotTable
 - (C) PivotDate
 - (D) Rotate Table
- 112.** Which is the most common speed of the animals on this dot plot?
- (A) 50 mph
 - (B) 35 mph
 - (C) 30 mph
 - (D) 20 mph
- 113.** Pictographs, tally charts, and bar graphs all DISPLAY data. What does DISPLAY mean?
- (A) To write
 - (B) To show
 - (C) To find
 - (D) To stop
- 114.** Which of the following is NOT a purpose of data visualization mentioned in the slide?
- (A) Making presentations longer

- (B) Enhancing data accuracy
(C) Highlighting trends
(D) Making informed decisions
- 115.** When you select data and click on "Insert Chart," Excel automatically:
(A) Creates a Pie Chart by default
(B) Creates a Column Chart by default
(C) Asks you to choose chart type
(D) Inserts a Line Chart by default
- 116.** Where can you find what symbols mean on a pictograph?
(A) In the key
(B) In the title
(C) In the survey
(D) In the question
- 117.** In a graph, what stays the same?
(A) Labels
(B) Titles
(C) Increments
(D) Data
- 118.** A graph can help you see
(A) Things that are very small
(B) Mathematical relationships between data
(C) If your data is valid
(D) Things that are far away
- 119.** Which of the following strategies is recommended to enhance the readability of health education print materials for individuals with lower literacy levels?
(A) Increasing the complexity of sentences to encourage learning.
(B) Using technical jargon to ensure comprehensive understanding.
(C) Incorporating more text-heavy paragraphs for detailed explanations.
(D) Including graphics and pictures to aid comprehension.
- 120.** What information is contained in a data label?
(A) Axis values
(B) Data series names
(C) Data point values
(D) Category names
- 121.** The graphical representation of a cumulative frequency distribution is called
(A) Bar graph
(B) Histogram
(C) Frequency polygon
(D) Ogive
- 122.** What do we put at the top of a graph?
(A) X axis
(B) Data table
(C) Title
(D) Nothing
- 123.** Underneath or to the side of a diagram, there should be ____
(A) A written explanation about the diagram
(B) The name of the person who created the diagram
(C) The date the diagram was made
(D) None of above
- 124.** A visual representation of worksheet data.
(A) Column
(B) Data
(C) Chart
(D) Legend
- 125.** Graphs with only distinct points
(A) Sequence
(B) Function
(C) Continuous graph
(D) Discrete graph
- 126.** What would be the best label for the bottom axis of the graph below?
(A) Number of Sunny Days
(B) January
(C) Months
(D) June

127. Which type of data visualization should you use to represent frequencies for a categorical variable?
- (A) Bar graph
 - (B) Histogram
 - (C) Scatterplot
 - (D) Pie chart
128. In order to present a significant event in history, what would be the most effective way of presenting it that would make it that would make it more exciting and fun-filled learning exploration and attainment?
- (A) Tableau
 - (B) Graffiti Wall
 - (C) Carousel discussion
 - (D) Buzz session
129. What is one of the ways Excel helps users communicate information to the reader?
- (A) By providing raw data
 - (B) By producing illuminating and visually appealing charts
 - (C) By offering a range of different charts
 - (D) By requiring the reader to scan through rows of complex records
130. What makes this data display misleading?
- (A) The colours
 - (B) That there is no labels on the sections
 - (C) The inconsistent group amounts
 - (D) All of the above
131. A student plots the points (1, 2), (2, 4), and (3, 6) on a graph. What type of relationship do these points represent?
- (A) Cubic relationship
 - (B) Exponential relationship
 - (C) Linear relationship
 - (D) Quadratic relationship
132. Arjun, Mia, and Daniel are working on a project. They have a lot of raw data and are unsure about how to present it. Arjun suggests they use data visualization. How would you describe data visualization to them?
- (A) The representation of data or information in a graphical or pictorial format.
 - (B) The process of encrypting data
 - (C) The analysis of data using statistical methods
 - (D) The process of converting data into audio format
133. What is the vertical axis also called?
- (A) The y-axis
 - (B) The x-axis
 - (C) The main axis
 - (D) The important axis
134. What is the primary purpose of using a data label in a chart?
- (A) To indicate the data source
 - (B) To show the chart title
 - (C) To provide a legend for the chart
 - (D) To display specific data values
135. A group of hamster owners was asked about the number of hamsters each owns. The results are shown in the frequency table. Which dot plot correctly shows the data?
- (A)
 - (B)
 - (C)
 - (D)
136. What are the headings given to X-axis and Y-axis known as?
- (A) Data Series
 - (B) Axes Titles
 - (C) Legends
 - (D) None of above
137. Title of the vertical Axis.
- (A) Y-Axis Title
 - (B) X-Axis Title
 - (C) Plot Area
 - (D) Gridline

138. Small line or marker on the X axis and Y axis to help in reading the values
(A) Pointer
(B) Gridline
(C) Tick mark
(D) Plot area
139. The key shows one ice cream cone picture equals 2 votes. You see 3 cone pictures for vanilla. How many votes for vanilla?
(A) 6 votes
(B) 5 votes
(C) 4 votes
(D) 3 votes
140. Which of the following is an aesthetic in data visualization?
(A) Dataset
(B) Variable
(C) Color
(D) Algorithm
141. What is the name of the vertical (up and down) axis of the graph?
(A) X axis
(B) Y axis
142. How can you visually represent the relationship between three sets in a Venn diagram?
(A) By drawing three separate circles that do not overlap.
(B) By drawing three overlapping circles, each representing a set, and shading the areas that meet the specified conditions.
(C) By using a bar graph to show the relationships between the sets.
(D) By listing the elements of each set in a table.
143. How do you construct a frequency polygon?
(A) Start at bottom left hand corner of first column and draw a straight line through the top right hand corner of each column
(B) Start at origin and draw a straight line through the centre of each column
(C) Start at centre of column and draw a straight line through the left hand corner of the next column.
(D) Start at origin and draw a straight line through the right hand corner of each column
144. On which part of the chart are the values entered in a data sheet displayed?
(A) The title area.
(B) The legend.
(C) The y-axis.
(D) The x-axis.
145. The figure above is a chart that represents the effect of irrigation on plant height. Which feature should be added to the chart that will explain the chart's purpose?
(A) Axis title
(B) Chart title
(C) Data label
(D) Legend
146. Which type of graph represents the cumulative frequencies for the classes in a frequency distribution?
(A) Histogram
(B) Ogive
(C) Frequency Polygon
(D) Relative Frequency Histogram
147. What is the y-axis?
(A) Month
(B) Sam's weight
(C) January
(D) Weight in kg
148. Which of these is not a visualization technique?
(A) System maps
(B) Neural network
(C) Pie chart
(D) Decision tree

1.2.5 Charts and Graphs

1. Date represented in a worksheet can be easily understood by:
(A) Database.
(B) Letter.
(C) Chart.
(D) Symbol.
2. Gary wants a graphical representation of his project data that illustrates the relationships between time and height. What should Gary use to represent this data?
(A) A cell range
(B) A column
(C) A chart
(D) A table
3. Which of the following is a common method for visualizing data in science?
(A) Bar graph
(B) Pie chart
(C) Line graph
(D) All of the above
4. Which component of a chart is used to plot the values?
(A) Legends
(B) Chart Title
(C) X-Axis
(D) Y-Axis
5. Which of the following is a type of chart?
(A) Text
(B) Bar
(C) Audio
(D) Image
6. What does the Chart Elements menu allow you to do?
(A) Change chart type
(B) Add, customize, and remove chart elements
(C) Edit chart data
(D) Apply preformatted styles
7. This part of the chart is usually horizontal and contains categories.
(A) X axis
(B) Y axis
(C) Legend
(D) Chart title
8. What type of information is typically found in the legend of a chart?
(A) The main idea
(B) The data source
(C) The meaning of symbols
(D) The author's opinion
9. Identify the most appropriate features of graphs and charts. You may choose more than one answer
(A) Normally colourful
(B) Often accompany text
(C) Can be found in newspaper, business documents and academic materials
(D) Full of illustration
10. Horizontal axis of a chart is known as ____
(A) Category axis
(B) Value axis
11. The key that identifies the shadowing, coloring, or patterns used for the information shown in the graph.
(A) Legend
(B) Labels
(C) Tick marks
(D) Grids
12. Which choice correctly identifies the label of the horizontal axis on the chart shown?
(A) Basketball Game Results
(B) Shots Made
(C) Players
(D) Eric, Jamie, Elizabeth, Bryan, David

13. What is the primary benefit of using charts in presentations?
- (A) To confuse the audience
 - (B) To add more text
 - (C) To visually summarize data
 - (D) To replace the speaker
14. Identify the chart element, which has been highlighted with red oval in the image.
- (A) Legend
 - (B) Data Label
 - (C) Data Table
 - (D) Axis Titles
15. Graphs and smart objects in Microsoft Excel are tools of Data Visualisation.
- (A) True
 - (B) False
16. A chart is also called a graph.
- (A) True
 - (B) False
17. Which technique is primarily used to visualize data trends?
- (A) Linear Regression
 - (B) Bar Charts and Line Graphs
 - (C) Clustering
 - (D) Monte Carlo Simulation
18. Which is NOT a type of chart?
- (A) Pie
 - (B) Column
 - (C) Bar
 - (D) Axis
19. Which of the following charts is used to represent accumulated totals over time, comparing two or more quantities-similar to a line chart?
- (A) Area
 - (B) Pie
 - (C) Scatter
 - (D) Column
20. Emphasizes the magnitude of change over time
- (A) Area
 - (B) Bar
 - (C) Column
 - (D) Pie
21. In Excel Chart wizard term data categories refers to
- (A) A chart plot area.
 - (B) A horizontal axis.
 - (C) The organization of individual values with a chart's data series.
 - (D) The data range that supply chart data.
22. A graph is a ___ of your data
- (A) Description
 - (B) Variable
 - (C) Answer
 - (D) Picture
23. Which of the following is not a legal chart type in MS-Excel?
- (A) Area chart.
 - (B) Column chart.
 - (C) Row chart.
 - (D) XY chart.
24. What are the steps to create a chart?
- (A) Highlight cells, click "Insert" and choose a chart.
 - (B) Click "Insert" and choose a chart.
 - (C) Highlight cells, click "View" and choose a chart.
 - (D) Highlight cells, click "Data" and choose a chart.
25. The ___ -axis is vertical and contains the dependant variable.
- (A) X
 - (B) Y
 - (C) Z
 - (D) None of the above

26. A horizontal or vertical line that extends across the plot area of the graph and makes it easier to read and understand.
- (A) Gridline
 - (B) Tick Mark
 - (C) Legend
 - (D) Plot Area
27. A chart can be moved to a separate sheet.
- (A) True
 - (B) False
28. What is a chart?
- (A) A visual way to display and compare data
 - (B) A way of arranging data
 - (C) A calculation that describes the relationship between cells
 - (D) A group of cells
29. A chart that appears on the same sheet as the spreadsheet/worksheet it represents.
- (A) Same
 - (B) Linked
 - (C) Separate
 - (D) Embedded
30. A collection of related values from a worksheet
- (A) Data mark
 - (B) Data series
 - (C) Legend
 - (D) Data point
31. In MS-Excel the chart wizard
- (A) Can place a chart on a new chart sheet or on any sheet in the workbook.
 - (B) Can only place a chart on new chart sheet.
 - (C) Can only place a chart on a new blank worksheet.
 - (D) None of these.
32. What is the purpose of a legend in an Excel chart?
- (A) To display the data labels
 - (B) To provide a title for the chart
 - (C) To show the values of each data point
 - (D) To identify the data series in the chart
33. The Y axis runs
- (A) Up and down
 - (B) Right to left
 - (C) On a diagonal
 - (D) None of above
34. What is the missing part?
- (A) Title
 - (B) Name of vertical axis
 - (C) Name of the horizontal axis
 - (D) Unit
35. The units of measurement used on the axes of a chart or a graph.
- (A) Scales.
 - (B) Non-contiguous data.
 - (C) Contiguous data.
 - (D) Double Data Entry.
36. The title of the horizontal axis.
- (A) Y-Axis Title
 - (B) X-Axis Title
 - (C) Legend
 - (D) Linked Chart
37. Which answer best describes a chart?
- (A) A chart is most commonly used to display trends.
 - (B) A chart is most commonly used to display comparisons
 - (C) A chart is usually displayed in columns.
 - (D) A chart is usually displayed using lines.
38. Which statement about charts is true?
- (A) Chart data is usually represented as text, with graphics used only to annotate the data.
 - (B) Chart data is usually represented in animated form so that it can be more quickly interpreted than reading through the raw data.

- (C) A chart is a graphical representation of data that illustrates the relationships between parts of the data.
- (D) A chart is a tabular representation of data that displays the data in columns and rows.
39. The value axis that shows the range of values in a chart.
- (A) X axis
- (B) Data point
- (C) Data series
- (D) Y axis
40. In order to edit a chart, you can
- (A) Triple click the chart object.
- (B) Click and drag the chart object.
- (C) Double click the chart object.
- (D) Click the chart object.
41. This line runs straight across from left to right
- (A) Horizontal axis
- (B) Vertical axis
- (C) Table
- (D) Column
42. Why do Charts have a legend?
- (A) To tell what the colors mean
- (B) To keep the pictures in order
- (C) Just for fun
- (D) None of above
43. Which of these is NOT a type of data visualization tool?
- (A) Pie chart
- (B) Bar graph
- (C) Line graph
- (D) Essays
44. To change Chart styles, we click on ____
- (A) Home tab
- (B) Insert tab
- (C) Format tab
- (D) Design tab
45. Pyplot interface of matplotlib library is used to create ____ charts.
- (A) 3 D
- (B) 2 D
- (C) 1 D
- (D) None of above
46. Used in a graph to represent values.
- (A) Plot Area
- (B) Gridline
- (C) Data Series
- (D) Data Markers
47. The high point of a chart is called a ____
- (A) Poke
- (B) Pike
- (C) Peak
- (D) None of above
48. Every chart must have a
- (A) Chart name
- (B) Chart title
- (C) Chart slogan
- (D) Chart word
49. A chart element that explains what each color or pattern in the chart represents is called:
- (A) Axis Title
- (B) Chart Title
- (C) Legend
- (D) Data Series
50. How are line graphs and pictographs different?
- (A) Line graph uses pictures to represent data while pictographs show change over time.
- (B) Pictograph uses percentages while line graphs use lines and points.
- (C) Pictograph has symbols or pictures to represent data while line graphs have points and lines.
- (D) Line graphs use lines and points while pictographs show parts of a whole.

51. When could you use a right vertical axis on a chart?
- (A) When you have too much data for one axis.
 - (B) When you have more than 10 data points.
 - (C) When you have more than 5 categories.
 - (D) When you are measuring two different sets of data.
52. The object that explains the symbols, colors, or patterns used to differentiate the series in a chart.
- (A) Data Series
 - (B) X-Axis
 - (C) Y-Axis
 - (D) Legend
53. Abigail and Daniel are working on a project where they need to explore two columns of data at the same time. Oliver suggests a few visualization techniques. Which of these techniques would be most suitable for Abigail and Daniel's needs?
- (A) Bar charts and Histograms
 - (B) Bar charts
 - (C) Histograms
 - (D) Scatter plots and Cross tab
54. Which of the following Google tool can be used for data visualization?
- (A) Google Site
 - (B) Google Meet
 - (C) Google Data Studio
 - (D) Google Maps
55. This part of the chart is usually vertical and contains data.
- (A) Y axis
 - (B) X axis
 - (C) Legend
 - (D) Chart title
56. Imagine you are preparing a presentation for your company's annual review meeting.
- Which types of charts could you potentially insert into your PowerPoint slides to showcase the company's annual sales data effectively?
- (A) Bar charts, line charts, pie charts, scatter plots
 - (B) Scatter charts, doughnut charts, waterfall charts, radar charts
 - (C) Gantt charts, bubble charts, organization charts, timeline
 - (D) Flow charts, area charts, radar charts, histogram
57. A pictograph shows that 5 students like reading, 3 like sports, and 2 like music. If each picture represents 1 student, how many pictures would you draw for students who like sports?
- (A) 2
 - (B) 4
 - (C) 3
 - (D) 5
58. Which of the following lists the types of charts shown in the correct order?
- (A) Column, pie, bar
 - (B) Pie, line, scatter
 - (C) Column, pie, line
 - (D) Bar, pie, line
59. Which chart element identifies the data series that each color represents on the chart?
- (A) Vertical axis
 - (B) Legend
 - (C) Horizontal axis
 - (D) Title
60. A ___ is a graphical representation of data.
- (A) Algorithm
 - (B) Steps
 - (C) Charts
 - (D) None of the above
61. In Excel charts, what is data series?
- (A) The title of the chart
 - (B) The horizontal axis labels
 - (C) A collection of related data points
 - (D) The vertical axis labels

62. Which of the following is an example of a misleading chart?
- (A) A chart with a clear title and labels
 - (B) A chart with distorted scales
 - (C) A chart with accurate data
 - (D) A chart with a detailed legend
63. Chart titles should be
- (A) To the left of the chart
 - (B) To the right of the chart
 - (C) Centered over the chart
 - (D) At the bottom of the chart
64. How can you change your chart into a different type?
- (A) Change Chart Type button
 - (B) Select Data option
 - (C) Edit chart data
 - (D) Apply preformatted styles
65. Which graphic organizer is used to show events with specific dates/duration?
- (A) Fishbone Chart
 - (B) Timeline Map
 - (C) Flowchart
 - (D) Sequence diagram
66. Which option depicts the pattern, color, or symbols that are assigned to the data series.
- (A) Chart Title
 - (B) Plot Area
 - (C) Data table
 - (D) Legend
67. Which chart is used for hierarchical part-to-whole relationships and can be difficult to read when there are many small segments?
- (A) Pie Chart
 - (B) Bar Chart
 - (C) Tree Map
 - (D) Line Chart
68. Study the example. Which type of chart is shown?
- (A) Bar chart
 - (B) Scatter chart
 - (C) Column chart
 - (D) Line chart
69. What is the purpose of data labels in an Excel chart?
- (A) To display the category names on the chart
 - (B) To provide a description of the chart's data
 - (C) To identify each data point with its value
 - (D) To create a legend for the chart
70. Which sentence correctly uses the word 'chart'?
- (A) The chart was full of colorful characters.
 - (B) The chart displayed the sales data for the year.
 - (C) The chart sang a beautiful melody.
 - (D) The chart was a thrilling adventure.
71. The lines that run across the plot area are known as ____
- (A) Chart title
 - (B) Legends
 - (C) Gridlines
 - (D) Data series
72. A pie chart is a circular graph.
- (A) True
 - (B) False
73. Observe the image and choose the correct type of Chart
- (A) Line Chart
 - (B) Pie Chart
 - (C) Area Chart
 - (D) Scatter Chart
74. Which component helps readers understand what the chart displays?
- (A) Legend colors
 - (B) Title of the chart
 - (C) Axis tick marks
 - (D) Bar outlines

75. Which types of charts can excel produce?
 (A) Line graphs and pie charts only
 (B) Only line graphs
 (C) Bar charts, line graphs and pie charts
 (D) Bar charts and line graphs only
76. How many steps should we use to make a 3D column chart?
 (A) 3
77. Horizontal or vertical line that extends across the plot area on the chart
 (A) Grid line
 (B) Plot line
 (C) Data market
 (D) Data series

1.2.6 Statistical Charts

1. What is the Median on this plot?
 (A) 89
 (B) 79
 (C) 87
 (D) 85
2. The summary function that calculates the smallest data value in a PivotTable report is —
 (A) Varp
 (B) Min
 (C) Max
 (D) Average

1.3 Charts and Graphs

1.3.1 Bar Chart

1. Which data viz example in the Edpuzzle used an example of movie award wins for directors across different genres of movies for their data visualization?
 (A) Bar Chart
 (B) Pie Chart
 (C) Histogram
 (D) Line Chart
2. What type of Data Display is this?
 (A) Bar Graph
 (B) Pie Chart
 (C) Stem & Leaf Plot
 (D) Scatter Plot
3. Each bar should have the same width.
 (A) True
 (B) False
4. Name the type of graph.
 (A) Pie chart
- (B) Tally chart
 (C) Pictograph
 (D) Bar graph
5. What are the advantages of using a bar chart over other types of charts?
 (A) Bar charts cannot visually represent large amounts of data
 (B) Bar charts are useful for comparing different categories of data, they are easy to understand and interpret, and they can visually represent large amounts of data.
 (C) Bar charts are difficult to understand and interpret
 (D) Bar charts are not useful for comparing different categories of data
6. 'The vertical axis of bar graph is also known as x-axis'
 (A) True
 (B) False

7. What type of chart uses bars to represent data?
(A) Pie chart
(B) Bar chart
(C) Line chart
(D) None of above
8. What should the labels along the bottom of the bar chart indicate?
(A) The quantity of each category
(B) The title of the chart
(C) The types of data
(D) The creator of the chart
9. When comparing different categories in a bar chart, which visual element should be used?
(A) Scatter plot
(B) Line graph
(C) Bars
(D) Pie chart
10. Which statement best describes a bar chart?
(A) It uses dots to plot paired numbers
(B) It uses slices to show parts of a whole
(C) It uses lines to show trends over time
(D) It uses bars to compare categories
11. Which would you choose to create a bar diagram?
(A) Edit, Chart.
(B) Insert, Chart.
(C) Tools, Chart.
(D) Format, Chart.
12. Here is an image of a bar chart. How many mistakes can you spot on this graph?
(A) 2
(B) 3
(C) 4
(D) 1
13. What should the bars in a bar chart have between them?
(A) Different widths
(B) Equal gaps
(C) Different colors
(D) No gaps
14. What is the difference between a vertical bar chart and a horizontal bar chart?
(A) The color of the bars
(B) The length of the bars
(C) The orientation of the bars
(D) The shape of the bars
15. Which of the following is the definition of BAR CHART?
(A) Data presentation using pictures or symbols to show frequencies
(B) It shows data that have been collected over a time period.
(C) It represents data in form of bars of equal width.
(D) A type of graph in which a circle is divided into sectors that each represent a proportion of the whole.
16. What ensures clarity between different bars in a bar chart?
(A) Color differences
(B) The labels used
(C) Spacing between the bars
(D) The height of the bars
17. What do you call the graph which uses horizontal or vertical bars to represent data?
(A) Bar Graph
(B) Line Graph
(C) Pictograph
(D) Pie graph
18. You need a ruler to draw a bar chart.
(A) True
(B) False
19. Which is NOT a feature of a bar graph?
(A) Scale
(B) Axes
(C) Bars
(D) Columns

20. When is it more appropriate to use a bar chart instead of other types of charts, such as line charts or pie charts?
- (A) When showing the percentage distribution of a whole
 - (B) When comparing the relationship between two variables
 - (C) When comparing different categories or showing discrete data points.
 - (D) When measuring temperature over time
21. A ____ chart displays data in the form of rectangular rods.
- (A) Doughnut
 - (B) Pie
 - (C) Line Chart
 - (D) Column Chart
22. What are geo-located bar charts used for?
- (A) They are bar charts on a map.
 - (B) They are bar charts that have got lost.
 - (C) They are bar charts that appear on computers / digitally only.
 - (D) They are bar charts that show unusual data only.
23. What type of graph is this?
- (A) Pie chart
 - (B) Histogram
 - (C) Bar graph
 - (D) Line graph
24. A chart that has a series of vertical columns each representative of a data series is a ____ chart.
- (A) Pie
 - (B) Column
 - (C) Line
 - (D) Stacked Bar
25. Which of the following chart types is best suited for comparing values across different categories?
- (A) Line chart
 - (B) Scatter plot
 - (C) Pie chart
 - (D) Bar chart
26. Which visualization technique is best for comparing categories?
- (A) Line graph
 - (B) Scatter plot
 - (C) Bar chart
 - (D) Pie chart
27. What is essential to include on the vertical axis of a bar chart?
- (A) Decorative images
 - (B) The title of the chart
 - (C) The numerical scale
 - (D) The categories being compared
28. Which tab is used to create a column chart?
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
29. There should always be the same space between bars.
- (A) True
 - (B) False
30. How do you create a bar chart using a given set of data?
- (A) Use a calculator to calculate the average of the data
 - (B) Use data visualization software like Microsoft Excel or Google Sheets to input the data and select the bar chart type.
 - (C) Draw the bars by hand on a piece of paper
 - (D) Ask someone else to create the bar chart for you
31. What is the difference between Bar and Column charts?
- (A) The number of bars
 - (B) One uses vertical bars, and one uses horizontal bars
 - (C) The width of the bars
 - (D) The length of the bars

32. When creating a bar chart, what should be the title of the chart?
- (A) The title should be descriptive of the data being represented.
 - (B) The title should be left blank.
 - (C) The title should be a random phrase that has nothing to do with the data.
 - (D) The title should be the name of the person who created the chart.
33. Bars of a Bar graph are of
- (A) Equal length and Equal width
 - (B) Unequal length but Equal width
 - (C) Equal length but Unequal width
 - (D) Unequal length and unequal width
34. Which type of chart compares the quantities or amounts in a series of cells?
- (A) Scatter chart
 - (B) Bar chart
 - (C) Radar chart
 - (D) Pie chart
35. What is a bar graph?
- (A) A chart that uses numbers to collect data.
 - (B) A letter or figure that stands for something.
 - (C) A graph that uses bars to display data.
 - (D) Uses pictures to display data.
36. It has horizontal bars that represent numerical value.
- (A) Line Chart
 - (B) Bar Chart
 - (C) Column Chart
 - (D) Pie Chart
37. Which of the following charts uses vertical bars to display data?
- (A) Bar
 - (B) Pie
 - (C) Area
 - (D) Column
38. Why is this a bar chart and not a histogram?
- (A) It's based on quantitative data
 - (B) It's based on categorical data
39. What type of graph uses bars to represent data?
- (A) Pie chart
 - (B) Line graph
 - (C) Scatter plot
 - (D) Bar graph
40. Which axis is typically used for numerical scale in a vertical bar chart?
- (A) Legend shows scale
 - (B) Y-axis shows scale
 - (C) X-axis shows scale
 - (D) Z-axis shows scale
41. An easier alternative to a pie chart is called a ____?
- (A) A divided (or compound) bar chart.
 - (B) A flood hydrograph.
 - (C) A bar chart.
 - (D) An alternative pie chart.
42. A bar chart has categories to compare.
- (A) True
 - (B) False
43. Sam is struggling to read his bar chart. He has labelled the numbers at the side, but what else should he have done?
- (A) Label each bar along the bottom
 - (B) Colored them neatly
 - (C) Made all the bars bigger to see them clearly
 - (D) Turned the graph upside down
44. What type of chart uses vertical bars to show amounts in different categories?
- (A) Column Chart
 - (B) Histogram
 - (C) Scatter Plot
 - (D) Dot Plot

45. What is the appropriate scale for a bar chart if the data ranges from 0 to 100?
- (A) 0 to 50 with intervals of 10
 - (B) 0 to 100 with intervals of 5
 - (C) 0 to 200 with intervals of 10
 - (D) 0 to 100 with intervals of 10 or 20
46. When creating a bar chart, which practice helps accurate comparison between bars?
- (A) Equal bar widths
 - (B) Curved bar edges
 - (C) Unequal bar widths
 - (D) Random axis labels
47. Which statement about axes is true for basic bar charts?
- (A) Both axes show frequencies
 - (B) One axis shows categories
 - (C) Both axes must be vertical
 - (D) Neither axis shows numbers
48. A column Chart use ____ bar to represent data.
- (A) Horizontal
 - (B) Vertical
49. What is the main advantage of using bar graphs to represent data?
- (A) It is colourful
 - (B) Easy to compare data of different things
 - (C) You can analyse more complex data.
 - (D) None of the above
50. If the rectangular bars of a graph are drawn horizontally, then this graph is called a ____
- (A) Histogram
 - (B) Pie chart
 - (C) Line graph
 - (D) Bar chart
51. Lollipop chart is a variation of:
- (A) Histogram
 - (B) Pie chart
 - (C) Bar chart
 - (D) Box plot
52. Which two charts typically have categories arranged on the horizontal axis and values on the vertical axis?
- (A) Pie and bar charts
 - (B) Column and line charts
 - (C) Column and pie charts
 - (D) Pie and line charts
53. In a bar chart, what do the vertical and horizontal axes represent?
- (A) X and Y coordinates
 - (B) Dependent and independent variables
 - (C) Width and height
 - (D) Latitude and longitude
54. Which of the following is a key advantage of using a bar chart over a pie chart?
- (A) It requires less space
 - (B) It can display more categories clearly
 - (C) It is easier to create
 - (D) It shows percentages more effectively

1.3.2 Multiple Bar Chart

1. Which of the following best describes grouped bar charts?
 - (A) Bars are stacked on top of each other
 - (B) Bars for different groups are placed side by side for each category
 - (C) Only one bar per category
 - (D) Bars are arranged in a circle
2. Which type of compound bar chart shows bars placed next to each other?
 - (A) Stacked
 - (B) Side-by-Side
3. Which of the following matches the meaning of the picture?
 - (A) Grouped Bar Chart

- (B) Stacked Bar Chart
 - (C) Segmented Bar Chart
 - (D) None of above
4. This is a side-by-side compound bar chart.
- (A) True
 - (B) False
5. What kind of compound bar chart is this?
- (A) Side-by-Side
 - (B) Stacked

1.3.3 Stacked Bar Chart

1. How many variables should you be studying when you use a 100% stacked bar chart?
 - (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
2. Stacked bar charts are used to show:
 - (A) Trends
 - (B) Distributions
 - (C) Nested proportions
 - (D) Outliers
3. Is this a 100% stacked bar chart?
 - (A) Yes
 - (B) No
 - (C) Maybe
 - (D) None of above
4. Another name for a stacked bar chart is..?
 - (A) A multiplied bar chart.
 - (B) A separated bar chart.
 - (C) A boxed bar chart.
 - (D) A divided bar chart.
5. Why would we use a stacked bar chart?
 - (A) To show the same data set multiple times in one bar.
 - (B) To show two different data sets in one bar.
 - (C) To make our bar charts more colourful.
 - (D) To make our bar charts look more complicated.
6. Is this a stacked bar graph?
 - (A) Yes
 - (B) No
 - (C) Maybe
 - (D) None of above
7. Main Component of stacked bar chart
 - (A) X-axis
 - (B) Y-axis
 - (C) Colour
 - (D) Size
8. This is a stacked compound bar chart.
 - (A) False
 - (B) True

1.3.4 Line Chart

1. How do you create a line graph in Excel?
 - (A) Highlight your data, click on 'Data' > 'Chart Options', and pick a design.
 - (B) Choose your data, navigate to 'View' > 'Graph', and select a format.
 - (C) Select your data, go to 'Insert' > 'Line Chart', and choose a style.
 - (D) Select your data, go to 'File' > 'New Chart', and choose a type.
2. Which parameter can be used to change the style of a line chart?
 - (A) Format
 - (B) Style
 - (C) Linestyle
 - (D) Design
3. William, David, and Avery are working on a school project. They have collected data are

- deciding how to present it. When would they use a line chart instead of a bar chart?
- (A) When they want to show changes over time
 - (B) When they want to compare categories
 - (C) When they are dealing with parts of a whole
 - (D) When they want to show frequency distribution
4. Line charts are best for:
- (A) Categories
 - (B) Trends over time
 - (C) Proportions
 - (D) Frequencies
5. If an arithmetic sequence is graphed, which of the following will best model the shape of the graph?
- (A) Line
 - (B) Curve
 - (C) V-Shape
 - (D) None of above
6. What is the name of this graph?
- (A) Line plot
 - (B) Line graph
 - (C) Bar graph
 - (D) Frequency table
7. This is an example of a ____ plot.
- (A) Column
 - (B) Area
 - (C) Scatter
 - (D) Line
8. Which of the following is a common chart type used to show trends over time?
- (A) Bar chart
 - (B) Line chart
 - (C) Pie chart
 - (D) Area chart
9. Among the following which chart type is used to visualize a trend in data over intervals of time.
- (A) Histogram
 - (B) Bar chart
 - (C) Pie chart
 - (D) Line chart

1.3.5 Pie Chart

1. What are the key components of a pie chart?
- (A) The key components of a pie chart are the x-axis, y-axis, and data points
 - (B) The key components of a pie chart are the color, size, and shape
 - (C) The key components of a pie chart are the legend, gridlines, and background
 - (D) The key components of a pie chart are the title, categories, and the slices representing the data.
2. Which type of chart is a circular chart divided into sectors?
- (A) Column Chart
 - (B) Pie Chart
 - (C) Line Chart
 - (D) Bar Graph
3. For a breakdown of Karen's commission, which is the most appropriate chart
- (A) Line
 - (B) Stacked Column
 - (C) Pie
 - (D) Histogram
4. A Pie chart should have a title.
- (A) True
 - (B) False
5. The pie chart ____ the results of a survey.
- (A) Show
 - (B) Shows
 - (C) Showed
 - (D) Showing

6. Data graphed as slices of a circular area is a
(A) Bar chart
(B) Scatter plot
(C) Pie chart
(D) Column chart
7. What angle would you use to represent 42 blue cars out of 60 cars in total on a pie chart?
(A) 42 degrees
(B) 252 degrees
(C) 6 degrees
(D) 210 degrees
8. Create a pie chart from the following data: Category X-25%, Category Y-35%, Category Z-40%.
(A) Category X-40%, Category Y-25%, Category Z-35%
(B) Category X-30%, Category Y-30%, Category Z-40%
(C) Category X-20%, Category Y-40%, Category Z-40%
(D) The pie chart should have Category X occupying 25%, Category Y occupying 35%, and Category Z occupying 40%.
9. 'Ordinal or ranked data is most effectively presented using a pie chart.'
(A) True
(B) False
10. What is the total angle in a pie chart?
(A) 360 degrees
(B) 90 degrees
(C) 180 degrees
(D) 270 degrees
11. A pie chart with one or more slices offset from the main portion is called a(n) ____ pie chart.
(A) Exploded.
(B) Separated.
(C) Highlighted.
(D) All the above.
12. A Circle graph is also called a
(A) Pie chart
(B) Bar graph
(C) Pictograph
(D) None of above
13. What is the key feature of a pie chart?
(A) Circular representation of data with slices proportional to the data values
(B) 3D visualization of data
(C) Linear arrangement of data points
(D) Rectangular representation of data
14. Which graphic organizer is used to present data which is divided into sectors that each represent a portion of the whole?
(A) Bar Graph
(B) Pie Chart
(C) T Chart
(D) Line Graph
15. In Matplotlib, which function is used to create pie charts in Python?
(A) Plt.pie()
(B) Plt.graph()
(C) Plt.chart()
(D) Plt.plot()
16. What method is used to create a pie chart in Pyplot?
(A) Bar()
(B) Pie()
(C) Plot()
(D) Scatter()
17. How are the values represented on a circle graph?
(A) Values on a circle graph are represented as points on a scatter plot
(B) Values on a circle graph are represented as lines on a line graph
(C) Values on a circle graph are represented as bars on a bar graph
(D) Values on a circle graph are represented as sectors or slices of the circle, where each sector's size is proportional to the value it represents.

18. Which chart type displays data in the form of a circle?
(A) Line
(B) Pie
(C) Bar
(D) None of above
19. What is the total percentage of all sectors in a pie chart?
(A) 50%
(B) 75%
(C) 200%
(D) 100%
20. How many columns are used to make a PIE Chart?
(A) 1
(B) 2
(C) 5
(D) 10
21. When done correctly, the sector angles on a circle graph should add up to ____
(A) 100%
(B) 360 Degrees
(C) 90 Degrees
(D) 50%
22. Name the chart type
(A) Bar chart
(B) Line chart
(C) Pie chart
(D) Wall chart
23. What is used to emphasize one or more portions of the data?
(A) Pie
(B) Exploded pie
(C) Column
(D) Line

1.3.6 Histogram

1. The histogram summarizes the agedistribution of people living in El Paso, Texas. Which of the following best describes the data?
(A) Most people in El Paso are over the age of 50.
(B) About 80,000 people in El Paso are 55 years old.
(C) There are about 1,700 more people in their 20s than in their 30s.
(D) There are about 25,000 more people in their 50s than in their 60s.
2. A study was done to find out how many hours people spend playing video games each day. The results of the study are presented in the histogram above. How many people spend 4-5 hours playing video games?
(A) 10
(B) 75
(C) 35
(D) 20
3. In a histogram, the bars don't touch.
(A) True
(B) False
4. Based on the shape of this histogram, what would be true?
(A) The median & the mean would be about the same.
(B) The median would greater than the mean.
(C) The mean would be greater than the median.
(D) None of above
5. What does the fill property do in a histogram?
(A) Changes the height of the columns
(B) Controls the color of the histogram
(C) Determines if the histogram is filled with color
(D) Sets the border color
6. Emily is making a histogram for the data 12, 24, 56, 7, 34, 75, 86, 78, and 96. What is the most appropriate first interval?
(A) 0-5

- (B) 0-10
(C) 0-50
(D) 0-100
7. A histogram shows numerical data and has bars that touch.
(A) True
(B) False
8. What is the shape of the data distribution on the histogram?
(A) Skewed right
(B) Skewed left
(C) Symmetrical (normal distribution)
(D) Balloon shaped
9. According to the histogram, how many more automobiles cost \$35,000 or more than automobiles that cost less than \$20,000?
(A) 15
(B) 45
(C) 30
(D) None of above
10. Describe the shape of the relative frequency histogram.
(A) Skewed right
(B) Skewed left
(C) Approximately symmetrical
(D) None of above
11. What does a left-skewed histogram indicate about the data?
(A) The data has a longer tail on the left
(B) The data is evenly distributed
(C) The data has a longer tail on the right
(D) The data is normally distributed
12. What is the purpose of the `df.plot(kind='hist')` function?
(A) To create a histogram
(B) To create a line plot
(C) To create a scatter plot
(D) To create a bar chart
13. What are the ranges plotted on the x axis called?
(A) Class-ranges
(B) Class-intervals
(C) Levels
(D) None of the above
14. The histogram shows the winning speeds at the Daytona 500.a. Which interval contains the most data values?
(A) 120-129
(B) 130-139
(C) 140-149
(D) 150-159
(E) 160-169
15. Which statement below is the correct answer for the difference between bar graph and histogram?
(A) Bar graph and Histogram is actually same
(B) Histogram is better than bar graph to show discrete data
(C) Histogram groups numbers into ranges, but bar graph doesn't
(D) All statements above are true
16. Emily is making a histogram for the data: 12, 94, 61, 24, 77, 36, 56, 83, 7, 34, 45, 75, 86, 42, 91, 78, and 96. She wants to make 10 classes. What size should each interval be?
(A) 4
(B) 9
(C) 12
(D) 17
17. What interval size was used when creating this histogram?
(A) 5
(B) 10
(C) 11
(D) 9
18. What is the most accurate description of the method in which this data is organized?
(A) Frequency Histogram

- (B) Cumulative Histogram
(C) Bar Chart
(D) Box and Whisker Plot
19. Which of the following histograms could have been constructed from the same data as the boxplot?
(A) A
(B) B
(C) C
(D) D
(E) E
20. Several food critics rated a local restaurant on a scale from 1-60. The data is recorded in the stem-and-leaf plot. Which histogram represents the same data?
(A)
(B)
(C)
(D)
21. Alexis kept track of how many points she made each basketball game. Her points are in the table below. Alexis will organize her data into a histogram. How many games did she score between 20 and 29 points?
(A) 3 games
(B) 4 games
(C) 5 games
(D) 7 games
22. The histogram below summarizes the number of runs scored per game by Lexi's softball team last season. Which of the following best describes the data?
(A) Lexi's team played 15 games last season.
(B) Lexi's team scored 7 runs in 1 game last season.
(C) Lexi's team scored fewer than 4 runs in 9 games last season.
(D) Lexi's team scored more than 4 runs in 11 games last season.
23. The histogram above shows the results of a survey that asked people under the age of 30 how many times they have traveled on a plane. What is the shape of the histogram?
(A) The histogram is skewed to the right.
(B) The histogram is skewed to the left.
(C) The histogram is bell shaped.
(D) The histogram has no shape.
24. The histogram below shows how many state parks each state in the United States has.
(A) The data distribution is symmetrical.
(B) The data distribution is skewed right.
(C) The data distribution is skewed left.
(D) The data distribution has gaps.
25. Which of the following is an advantage of using histograms?
(A) They can display exact data values
(B) They are useful for identifying the distribution shape
(C) They can show changes over time
(D) They are best for small datasets
26. Paul recorded the height of several apple trees. Which histogram represents the data correctly?
(A)
(B)
(C)
(D)
27. The grams of sugar found in various cereals is shown in the table below. Which table shows all data in a histogram correctly?
(A) Histogram F
(B) Histogram G
(C) Histogram H
(D) Histogram J
28. Identify the data set that represents the histogram.
(A) 1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 17, 18
(B) 1, 10, 11, 13, 13, 14, 14, 14, 15, 15, 15, 15, 15, 16, 16, 16, 17, 17, 17, 17, 17, 18, 18, 18, 18
(C) 2, 10, 11, 12, 12, 13, 13, 13, 14, 14, 14, 14, 14, 14, 15, 16, 16, 16, 16, 17, 17, 17, 17, 17, 17, 18, 18

- (D) 2, 11, 11, 12, 14, 14, 14, 14, 15, 15, 15, 15, 15, 16, 16, 16, 16, 17, 17, 17, 17, 18, 18, 18
29. How many students are represented by the histogram?
- (A) Cannot be determined
(B) 9
(C) 31
(D) 35
30. What is the shape of the histogram?
- (A) Skewed Left
(B) Symmetric
(C) Skewed Right
(D) None of the options
31. These are used as the border between two consecutive bars in a histogram. They are the intermediate value between an upper class limit and the next lower class limit.
- (A) Class limits
(B) Class boundaries
(C) Frequencies
(D) Class marks
32. The histogram shows the total number of swimmers in different age groups who participated in a swimming competition. Based on the histogram, which statement is true?
- (A) There were 15 swimmers who were younger than 30 years old.
(B) A total of 10 swimmers were 50 years old or older.
(C) The number of swimmers who were 40 years old or older is less than the number of swimmer who were 29 years old or younger.
(D) A total of 70 swimmers participated in the competition.
33. A type of bar graph used to display numerical data that has been organized into equal intervals.
- (A) Line Plot
(B) Interval
(C) Frequency Table
(D) Histogram
34. What is the range of this histogram?
- (A) 19
(B) 1
(C) 13
(D) 5
35. The histogram shows the birth weights of 100 new born babies. How many babies weighed at least 8 pounds (8 pounds or more)?
- (A) 22
(B) 23
(C) 30
(D) 45
36. Use the frequency histogram to determine the class width
- (A) 7
(B) 8
(C) 9
(D) 10
37. Does this graph represent a histogram?
- (A) Yes
(B) No
38. What does it mean if a histogram is skewed right?
- (A) Most of the data points are concentrated on the left side, with fewer data points on the right.
(B) The data points are evenly distributed across the histogram.
(C) Most of the data points are concentrated on the right side, with fewer data points on the left.
(D) The histogram has a symmetrical distribution with no skew.
39. Which histogram shows the data in the table?
- (A) A
(B) B
(C) C
(D) D
40. Only the x-axis is labeled on a histogram.
- (A) True
(B) False

41. What type of chart is useful for comparing the frequency of different categories?
- (A) Histogram
 - (B) Scatter Plot
 - (C) Pie Chart
 - (D) Line Chart
42. Several farms were studied to see how many acres of land they spanned across. The amount of acres and the number farms with those acre amounts are displayed in the histogram above. What can you say about the shape of the histogram?
- (A) The histogram has no shape.
 - (B) The histogram is skewed right.
 - (C) The histogram is bell shaped.
 - (D) The histogram is skewed left.
43. How do you determine the height of a bar in a histogram?
- (A) The height of a bar represents the total number of bins in the histogram.
 - (B) The height of a bar indicates the average value of the data points in that bin.
 - (C) The height of a bar represents the number of data points (frequency) that fall within the corresponding bin range.
 - (D) The height of a bar shows the maximum value of the data points in that bin.
44. Which answer best fits the shape of the histogram?
- (A) Symmetric
 - (B) Skewed Left
 - (C) Skewed Right
 - (D) Uniform
45. What is the BEST summary of the frequency histogram data shown?
- (A) There were many small grains of sand, but just a few large grains in the sample.
 - (B) There were many large grains of sand, but just a few small grains in the sample.
 - (C) There were hundreds of sand grains in the sample.
 - (D) There were sand grains of all sizes in the sample.
46. According to the histogram, which country recorded the most immigrants between 1951 and 1960
- (A) Denmark
 - (B) Netherlands
 - (C) Norway
 - (D) Sweden
47. What does a symmetrical histogram look like?
- (A) A symmetrical histogram has a balanced shape, where the left and right sides are mirror images of each other.
 - (B) A symmetrical histogram has a skewed shape, with one side longer than the other.
 - (C) A symmetrical histogram has no clear shape and appears random.
 - (D) A symmetrical histogram is always bell-shaped and cannot vary in appearance.
48. The histogram below shows the results of a space unit test taken by the 9th graders at Gregson High School. Use the histogram to answer the questions.b. What does the y-axis of the histogram represent?
- (A) Points
 - (B) Students
 - (C) Space Unit Test
 - (D) None of above
49. A histogram is said to be skewed to the left if it has
- (A) Longer tail to the right
 - (B) Shorter tail to the right
 - (C) Longer tail to the left
 - (D) Shorter tail to the left
50. A survey was conducted to see how many cats pet owners own. The results of the survey are displayed in the histogram above. Which best describes the shape of the histogram?
- (A) The histogram is skewed left.
 - (B) The histogram is bell shaped.
 - (C) The histogram is skewed right.
 - (D) The histogram has no shape.

51. What is the effect of increasing the number of bins in a histogram?
- (A) It makes the histogram more detailed
 - (B) It reduces the detail of the histogram
 - (C) It has no effect on the histogram
 - (D) It makes the histogram less accurate
52. Which of the following best describes a bimodal histogram?
- (A) It has two peaks
 - (B) It has a single peak
 - (C) It is skewed to the right
 - (D) It is uniform
53. Determine the shape that best matches the histogram:
- (A) Skewed Left
 - (B) Approximately Normal
 - (C) Skewed Right
 - (D) None of the above
54. An online shopping website keeps track of its sales numbers. In particular, they keep track of how many packages each customer orders per month. These numbers are presented in the histogram above. What is the shape of the histogram?
- (A) The histogram is skewed left.
 - (B) The histogram is bell shaped.
 - (C) The histogram is skewed right.
 - (D) The histogram has no shape.
55. Density plots are smoothed versions of:
- (A) Scatter plots
 - (B) Histograms
 - (C) Bar charts
 - (D) Line charts
56. What symmetry does this histogram have?
- (A) Left-Skewed
 - (B) Right-Skewed
 - (C) Symmetric
 - (D) None of above
57. How many intervals do we have in the following histogram?
- (A) 2
 - (B) 4
 - (C) 6
 - (D) 0
58. Which of the following is true about histograms?
- (A) They can display categorical data
 - (B) They are used to show the distribution of numerical data
 - (C) They are the same as bar charts
 - (D) They can only be used for continuous data
59. What does a histogram with a single peak and symmetrical shape indicate?
- (A) The data is skewed
 - (B) The data is normally distributed
 - (C) The data has multiple modes
 - (D) The data is uniform
60. What is the basic function of an image histogram?
- (A) Compress the image
 - (B) Equalize the image
 - (C) Display intensity distribution
 - (D) Filter the image
61. What is true about the histogram?
- (A) The tallest black cherry trees are between 85 and 90 feet in height. The data is not symmetrical. The range is $90-60 = 30$ feet.
 - (B) The heights of the trees are distributed symmetrically.
 - (C) There is an outlier of 90 feet. The range is $10-0 = 10$.
 - (D) The tallest black cherry trees are between 75 and 80 feet in height and the data is symmetrical. The outlier is 60 feet.
62. To create a histogram for this data, what would go along the x-axis?
- (A) Frequency

- (B) Science
(C) Number of students
(D) None of above
63. In histograms, you always display your numbers in equal groups called bins.
(A) True
(B) False
64. The amount of each item sold at the bake sale was recorded in a line plot. Which histogram represents the same data represented in the line plot?
(A)
(B)
(C)
(D)
65. What is the range of ages shown in this histogram?
(A) 10 years
(B) 30 years
(C) 20 years
(D) None of the above
66. To construct a histogram, we have to estimate ____ or ____ to label the horizontal axis.
(A) Midpoints-class boundaries
(B) Lower class limits-upper class limits
(C) Frequencies-data entries
(D) Colours-numbers
67. Describe the histogram:
(A) Left Skewed
(B) Normal or Bell-Shaped
(C) Right Skewed
(D) Uniform or Flat
68. Ms. Kirschenbaum is making a histogram to show the scores on the last science test. She first lists the scores in a stemplot. How many units tall should the bar be for the interval 70-79?
(A) 2
(B) 5
(C) 9
(D) 11
69. Whats the meaning of HISTOGRAM?
(A) Is a type of bar graph used to display numerical data that have been organized into equal intervals.
(B) Is a type of line graph used to display numerical data that have been organized into equal intervals.
(C) Nothing.
(D) Is a type of pie chart used to display numerical data that have been organized into equal intervals.
70. What does a uniform histogram indicate about the data?
(A) The data is normally distributed
(B) The data has equal frequencies across all intervals
(C) The data is skewed to the left
(D) The data has a single peak
71. The histogram has a tail to the:
(A) Left
(B) Right
72. Which of the following statements about this distribution is not correct?
(A) The histogram is skew right.
(B) The median is less than the \$20.
(C) The IQR is \$35.
(D) The mean is greater then the median.
73. The table shows the number of photocopies made during one day at each of the 25 schools in a school district. Which histogram displays all the data in the table correctly?
(A)
(B)
(C)
(D)

74. Emily is making a histogram for the data: 12, 94, 61, 24, 77, 36, 56, 83, 7, 34, 45, 75, 86, 42, 91, 78, and 96. She wants to make 10 classes. What should the class width be?
- (A) 8
(B) 9
(C) 10
(D) 17
75. Describe the shape of this new histogram as approximately symmetric, skewed left, or skewed right? (a)
- (A) Approximately symmetrical
(B) Skewed left
(C) Skewed right
(D) None of above
76. The line plot shows the number of points David scored in 30 games. Which histogram represents the same set of data?
- (A)
(B)
(C)
(D)
77. What does it mean if a histogram starts at a value greater than 0?
- (A) It accurately represents the data.
(B) It may misrepresent the data, as it does not show the full range of values.
(C) It indicates a normal distribution of values.
(D) It suggests that there are no values below the starting point.
78. This histogram shows how many windows students have in their homes. How many students have exactly 7 windows?
- (A) 9
(B) 11
(C) Can not be determined
(D) 2
79. According to the histogram, everyone saw at least one movie.
- (A) True
(B) False
(C) Not enough information
(D) None of above
80. What does it mean if a histogram is symmetric?
- (A) A symmetric histogram indicates that the data is evenly distributed around a central value, with similar frequencies on both sides.
(B) A symmetric histogram shows that the data has a single peak on one side.
(C) A symmetric histogram means that the data is skewed to the left or right.
(D) A symmetric histogram indicates that there are no outliers in the data.
81. William surveyed several lawyers about their annual salaries. He recorded his results in the table. Which histogram represents the results from William's survey?
- (A)
(B)
(C)
(D)
82. What is an interval in a histogram?
- (A) A single data point in a histogram.
(B) A range of numbers that groups data points together in a histogram.
(C) The total number of data points in a histogram.
(D) A graphical representation of data points.
83. The horizontal axis of an ogive comes from this part of the frequency table:
- (A) Upper Class Limits
(B) Frequency
(C) Midpoint
(D) Cumulative Frequency
84. What is a histogram?
- (A) A graphical representation of the distribution of numerical data, showing the frequency of data points within specified intervals.

- (B) A type of bar graph that displays categorical data.
- (C) A method for calculating the mean of a data set.
- (D) A visual representation of data that uses lines to connect points.
85. A study was done to see how many students are generally in a graduating class. The study observed several different schools and many different classes. The results of this particular survey are presented in the histogram above. How many classes had a size between 181 and 240 students?
- (A) 15
- (B) 10
- (C) 30
- (D) 20
86. What are the main components of a histogram?
- (A) Colors, legends, and markers.
- (B) Axes, labels, and lines.
- (C) Classes, frequencies, and bars
- (D) Gridlines, tick marks, and titles.
87. Ms. Grainger assigned her students a book report worth 50 points. The histogram shows the distribution of the scores. Which statement about the data in the histogram must be true?
- (A) More than half the scores are from 41 to 50.
- (B) The highest score is 50.
- (C) Half the scores are less than 41.
- (D) Less than half the scores are more than 40.
88. What is the effect of overlapping intervals in a histogram?
- (A) Overlapping intervals can lead to confusion and misinterpretation of the data, making it difficult to accurately assess the frequency.
- (B) Overlapping intervals improve the clarity of the data representation.
- (C) Overlapping intervals have no effect on the histogram's accuracy.
- (D) Overlapping intervals increase the overall frequency count.
89. Is this a Histogram or a Dot Plot?
- (A) Histogram
- (B) Dot Plot
90. According to the histogram, what percentage of the people surveyed slept 12 hours or more?
- (A) 6
- (B) 9
- (C) 12
- (D) 15
91. What is the purpose of a cumulative frequency histogram?
- (A) To display the individual frequencies of a dataset.
- (B) To show the mean of a dataset.
- (C) To compare two different datasets.
- (D) To display the amount of the data that is less than or equal to a certain value.
92. How can you determine the range of data from a histogram?
- (A) By calculating the mean of the data represented in the histogram.
- (B) By identifying the lowest and highest values represented by the bins in the histogram.
- (C) By counting the number of bins in the histogram.
- (D) By analyzing the frequency of each bin in the histogram.
93. Which type of data visualization is this?
- (A) Frequency table
- (B) Bar graph
- (C) Histogram
- (D) Scatterplot
94. Which interval represents the peak of the histogram?
- (A) 64-67

- (B) 48-51
(C) 56-59
(D) The histogram does not have a peak.
95. Each of the 19 employees took a CPR test. The test scores are displayed below in a bar graph. Which of the following data sets could represent the scores shown in the histogram?
- (A) 53, 61, 68, 69, 71, 74, 75, 75, 77, 78, 83, 84, 87, 88, 91, 91
(B) 53, 68, 69, 70, 71, 74, 75, 75, 77, 78, 81, 85, 86, 88, 91, 91
(C) 57, 60, 63, 65, 66, 71, 72, 73, 77, 79, 79, 79, 80, 81, 81, 83, 89, 90, 91
(D) None of above
96. Lyn asked some of her classmates how many people are normally at home for dinner. She recorded her results in the histogram. Between what numbers of people did the least amount of respondents have at dinner?
- (A) 2 people
(B) 8-9 people
(C) 8-10 people
(D) 8 people
97. In a histogram, frequency is plotted along the ____ axis.
- (A) Horizontal
(B) Vertical
(C) Diagonally
(D) None of the above
98. In a computer class, students take a typing test to determine their speed. Based on the information in the histogram, what percent of students type less than 30 words per minute?
- (A) 32%
(B) 35%
(C) 30%
(D) 45%
99. The histogram shows the number of flowers on 20 plants. Find the most common number of flowers on the plants.
- (A) 2
(B) 3
(C) 7
(D) 4
100. What shape can we use to describe this histogram?
- (A) Left-Skewed
(B) Symmetric
(C) Right-Skewed
(D) None of above
101. Based on our class data histogram, what appears to be the approximate median hours of screen time?
- (A) 0-2 hours
(B) 4-6 hours
(C) 6-8 hours
(D) 16-18 hours
102. The following data shows prices of meal options at Bob's Burgers. Prices of Meal Options at Bob's Burgers \$6 \$7 \$7 \$8 \$9 \$14 \$14 \$14 \$15 \$15 \$15 \$15 \$16 \$16 \$17 Which histogram correctly displays the information above?
- (A)
(B)
(C)
(D)
103. Which of the following is a limitation of histograms?
- (A) They can only display continuous data
(B) They cannot show the exact values of data points
(C) They are not useful for large datasets
(D) They cannot show the distribution of data

1.3.7 Time Series Data

1. Viola makes gift baskets for Valentine's Day. She has 13 baskets left over from last year (HINT: time = 0) and she plans to make 12 more each day. If there are 15 work days until the day she begins to sell the baskets, how many baskets will she have to sell?
(A) 181
(B) 193
(C) 205
(D) 217
2. A longitudinal study records info
(A) As a snapshot of a particular time
(B) Over a long period of time
(C) At significant times in history
(D) At random times in the day
3. A town's population is 14,000, and it is increasing by 160 people every year. A nearby town has a population of 24,000, and it is decreasing by 200 people every year. In about how many years will the populations of the towns be equal?
(A) $14,000 + 160y = 24,000 - 200y$
(B) $14,000 + 160y = 24,000 + 200y$
(C) $14,000y + 160 = 24,000y - 200$
(D) $14,000 - 160y = 24,000 - 200y$
4. From 2010 to 2020, the number of households with internet access ____ steadily, from 70% to 80% in the final year.
(A) Decreased
(B) Remained constant
(C) Increased
(D) None of above
5. In contrast to the stability in Company A's sales, Company B's sales ____ significantly between 2010 and 2015.
(A) Remained
(B) Fluctuated
(C) Dropped
(D) None of above
6. A ____ shows when events happened and keeps them in order.
(A) Map
(B) Timeline
7. During which time interval was Xavier riding his scooter at the greatest speed?
(A) Between minute 1 and minute 2 of the ride
(B) Between minutes 2 and minute 4 of the ride
(C) Between minute 4 and minute 5 of the ride
(D) Between minutes 5 and minute 8 of the ride
8. Distance traveled over time (think paper airplanes)
(A) Categorical
(B) Numerical
(C) Data that changes over time
(D) None of above
9. During which 3 month interval were the most houses sold?
(A) Jan-Mar
(B) Apr-Jun
(C) Jul-Sep
(D) Oct-Dec
10. A 6 day interval for a moving average cannot be charted until after there are at least ____ days' worth of data.
(A) 5
(B) 6
(C) 7
(D) 12
11. Did the cost of a movie ticket increase or decrease between 1975 and 1985?
(A) Increase
(B) Decrease
12. A ____ shows the order in which events have occurred.
(A) Timeline
(B) Calendar
(C) Moon cycle
(D) None of above

13. Between which two years did the bear population remain constant (no change)?
(A) 2004 and 2005
(B) 2001 and 2002
(C) 2005 and 2006
(D) 2000 and 2001
14. What type of plot is used to visualize growth or decline over time?
(A) Histogram
(B) Scatter plot
(C) Line plot
(D) Bar chart
15. Between which two times was the greatest increase in number of shoppers?
(A) 12pm and 1pm
(B) 1pm and 2pm
(C) 2pm and 3pm
(D) 10am and 11am

1.4 Data Interpretation Techniques

1.4.1 Table Data Interpretation

1. Mr. Edwards asked his students to write their age in months, shown in the table below (ordered from least to greatest). What is the median of the data set?
(A) 130
(B) 139
(C) 145
(D) 150
2. A scientist studied a coral reef in an ocean. The scientist made a data table to record what was observed. How many populations are represented by the data?
(A) 2
(B) 6
(C) 67
(D) 101
3. A theater sold tickets for three movies. The table shows the number of tickets sold for each movie. What was the total number of tickets the theater sold for these three movies?
(A) 476
(B) 366
(C) 376
(D) 473
4. Which statement below fits the data table?
(A) A pH of 6 shows the best plant growth
(B) A pH of 4 grows the best plants
(C) A pH of 5 grows the best plants
(D) A pH of 4 or 5 grew the best plants
5. Find the difference between a total number of red color candies and a total number of blue color candies produced throughout the 6 years.
(A) 10
(B) 20
(C) 30
(D) 40
6. According to the table, what is the relative frequency of students ages 10-13 who eat breakfast?
(A) About 33%
(B) About 50%
(C) About 40%
(D) About 44%
7. Based on the data in the table, how many students played the three games that had the highest frequency?
(A) 62
(B) 57
(C) 60
(D) 61
8. Analyze the data in the table and determine the total number of trees planted in 2016 and 2017 combined. What is the average number of trees planted per year during these two years?

- (A) 15000
(B) 12000
(C) 18000
(D) 20000
9. How many students watched television for least number of hours?
(A) 2
(B) 3
(C) 4
(D) 5
10. How many students were 50 inches tall or taller?
(A) 7
(B) 17
(C) 13
(D) 6
11. B7:B9 indicates:
(A) Cells B7 and cell B9 only.
(B) Cells B7 through B9.
(C) Cell B8 only.
(D) None of the above.
12. From the table, is the function Linear or Non-linear?
(A) Linear
(B) Nonlinear
13. Which table element runs vertically (up and down)?
(A) Row.
(B) Cell.
(C) Property.
(D) Column.
14. For a 10-day period, a bank kept track of the number of new accounts opened each day. The results are shown in the table. What is the median number of accounts opened per day during this 10-day period?
(A) 5
(B) 5.3
(C) 5.5
(D) 6
15. Directions: The table shows the times it took different animals to cover various distances. Use the table to answer any questions that follow. Which animal's speed is the least?
(A) Giraffe
(B) Rabbit
(C) Antelope
(D) Cheetah
16. A table shows the number of hours spent on different activities. If a student spends 3 hours on homework and 2 hours on sports, how many hours do they spend in total?
(A) 5 hours
(B) 7 hours
(C) 6 hours
(D) 4 hours
17. A) Which grade has the most number of students?
(A) A
(B) B
(C) C
(D) D
(E) E
18. A store sells loaves of bread. The table below shows the number of loaves of bread sold each day for a week. What is the difference between the mean and median number of loaves of bread sold?
(A) 8
(B) 12
(C) 19
(D) 25
19. What we call a grid of cells arranged in rows and columns.
(A) Cell
(B) Table
(C) Chart
(D) Design

20. A student throws a football three times. Another student records the distance, the amount of time the ball travels and the average speed in the table above. How many seconds did it take for the ball to travel 40 m during the third throw?
- (A) 0.5 s
(B) 1.0 s
(C) 1.5 s
(D) 2.0 s
21. Look at the four tables of data. Which table would be most suitable to produce a frequency diagram from?
- (A) A
(B) B
(C) C
(D) D
22. This is a table with a proportional relationship between A and B. Find the missing value of B.
- (A) 33
(B) 44
(C) 32
(D) 48
23. How many cookie recipes are shown in the data table?
- (A) 15
(B) 3
(C) 9
(D) None of above
24. The minimum number of rows and columns a word table can have is
- (A) Zero.
(B) 2 rows and 1 column.
(C) 2 rows and 2 column.
(D) 1 row and 1 column.
25. A table lists the weights of different fruits. If an apple weighs 200 grams and a banana weighs 150 grams, what is the total weight of both fruits?
- (A) 350 grams
(B) 400 grams
(C) 250 grams
(D) 300 grams
26. A table shows the distances travelled by different vehicles. If a car travelled 150 km and a bike travelled 30 km, what is the total distance travelled?
- (A) 180 km
(B) 160 km
(C) 200 km
(D) 120 km
27. Hilbert burns 120 calories per 30 minutes of weight training. Complete the table to chart his calorie expenditure for different amounts of time. What is the value of a?
- (A) $A = 80$
(B) $A = 6$
(C) $A = 60$
(D) $A = 120$
28. Six shops-P, Q, R, S,T, U-sell six products-A, B, C, D, E, F-as shown in the table below. The table shows the number of units (N) and price per unit (P) for a particular product in a particular shop.3) By what percent is the number of units of product B sold by shop S more/less than the number of units of product D sold by shop P?
- (A) 27.25%
(B) 29.33%
(C) 22.10%
(D) None of these
29. The data in the table represents a proportional relationship. What equation would represent this data accurately?
- (A) $y = \frac{1}{2}x$
(B) $y = \frac{1}{4}x$
(C) $y = 2x$
(D) $y = 4x$
30. Six shops-P, Q, R, S,T, U-sell six products-A, B, C, D, E, F-as shown in the table below. The table shows the number of units (N) and price

- per unit (P) for a particular product in a particular shop.1) What is the difference between the revenue earned by shop D by selling products R and T and that earned by shop F by selling products P and U?
- (A) Rs. 4,357
(B) Rs. 4,735
(C) Rs. 4,375
(D) None of these
31. Based only on the data table, what is MOST LIKELY a source of error?
- (A) The students did not use the same starting water temperature for each material
(B) The students used 2 minute time intervals and should have used longer ones
(C) The students only performed 1 trial
(D) The students measured in degrees Celsius.
32. Make a frequency table to organize the data. How many more states require children to be in school at either age 6 or age 7 than other ages?
- (A) 5 states
(B) 8 states
(C) 10 states
(D) 15 states
33. The employee at the department store counted the number of ties on each tie rack. How many racks have at least 30 ties but fewer than 40 ties?
- (A) 4
(B) 2
(C) 7
(D) 5
34. Is this table proportional? **HINT-Make sure to check y/x
- (A) Yes
(B) No
35. Which of the tables above has a constant of proportionality of \$0.20?
- (A) A & B
(B) A
(C) B
(D) All of them
36. The names and heights of four peaks are shown in the table below. Which mountain's height makes the following comparison true? $67,937 > \underline{\hspace{1cm}}$ Check all that apply.
- (A) 67,379 Sherry Peak
(B) 69,739 Bush Mountain
(C) 67,939 Barnes Peak
(D) 69,937 Guadalupe Peak
37. Does this table represent a proportional relationship? Find k for ALL values before you answer!
- (A) Yes, it's proportional
(B) No, it's not proportional
(C) Sometimes it's proportional
(D) None of above
38. What is the relationship between the 2nd column and the 3rd column?
- (A) There is no relationship between the two
(B) The 3rd column is less when the 2nd column is greater
(C) The 3rd column is twice the amount of the 2nd column
(D) The 3rd column increases as the 2nd column increases
39. Based on this table, which country would have the higher standard of living and why?
- (A) Israel because they have more natural resources which helps the economy
(B) Israel because the citizens are more educated, can earn higher wages, and have better quality of life
(C) Iran because they have more natural resources which they export
(D) Iran due to the lower expenses on education
40. Mario compares random download times of movies from three different services using the table. Find the mean of Amazon Prime.

- (A) 4.5
(B) 4.7
(C) 4.8
(D) 5.0
41. A vertical line of data in a table
(A) Row
(B) Column
(C) Vertical axis
(D) Horizontal axis
42. What is the name of the box formed by the intersection of rows and columns?
(A) Bar
(B) Cell
(C) Box
(D) Room
43. The total sales of all the seven years are the maximum for which battery?
(A) 32 AH
(B) 4 AH
(C) 16 AH
(D) 35 AH
44. Children voted for their favourite ice cream flavours. How many people chose Chocolate, Banana and Vanilla altogether?
(A) 150
(B) 50%
(C) 75
(D) 3
45. A table lists the number of books read by students in a month. If John read 5 books, Maria read 7 books, and Alex read 4 books, who read the most books?
(A) John
(B) Maria
(C) Alex
(D) They all read the same number of books
46. In a table, the explanatory note given at the bottom is called:
(A) Headnote
(B) Caption
(C) Footnote
(D) Stub
47. The table shows the number of each type of animal at a refuge. What percent of the animals are leopards?
(A) 45%
(B) 25%
(C) 50%
(D) 30%
48. A ____ is formed by the intersection of a column and row.
(A) Cell
(B) Table
(C) Sheet
(D) Grid
49. The data table shows the number of cars of each colour in a neighbourhood. How many more green cars are there than blue cars in the neighbourhood?
(A) 6
(B) 5
(C) 8
(D) 7
50. Data Tables: Day 10 had a temperature of-
(A) 24°C
(B) 10°C
(C) 42°C
(D) 7°C
51. True or False: A table is useful for showing bus times.
(A) True
(B) False
52. Mark is slicing oranges. The table shows how the number of slices is related to the number of oranges. Which best describes the relationship shown in the table?
(A) The number of slices is 4 times the number of oranges.
(B) The number of slices is 8 times the number of oranges.

- (C) The number of slices is 4 more than the number of oranges.
(D) The number of slices is 6 more than the number of oranges.
53. How many people have 'Bachelor' as their educational level?
(A) 20 people
(B) 30 people
(C) 15 people
(D) 100 people
54. Kaleigh is purchasing apps on her iphone. Based on the table, how much would it cost for 7 apps?
(A) \$3
(B) \$21
(C) \$24
(D) \$50
55. In a 10 x 10 grid that represents 800 items, ONE SQUARE represents what number?
(A) 1
(B) 8
56. The table shows the times of ocean high tides and low tides on a certain date at a New York State location. At approximately what time on the following day did the next high tide occur at this location?
(A) 4:40 a.m.
(B) 5:40 a.m.
(C) 4:40 p.m.
(D) 5:40 p.m.
57. Is this table proportional?
(A) Yes
(B) No
58. In that year, the total number of tourists from these eight countries or regions is ____
(A) 3 090 000
(B) 2 900 000
(C) 3 040 000
(D) 4 030 000
59. The data table below shows the dry-bulb and wet-bulb temperatures measured with a psychrometer on four different days at the same location. According to the data shown in the table, which day had the highest relative humidity?
(A) 1
(B) 2
(C) 3
(D) 4
60. Read the following table carefully and answer the questions. The given tables show the total population of 6 different cities and the ratio of literate to illiterate population and the percentage of graduates out of the literate population in each city. 2) The population of city R who are literate but not graduate is how much more than the average graduate population of city S and T together?
(A) 28800
(B) 29800
(C) 28900
(D) 29000
61. The number of trees and the number of apples are given in the table above. Determine which statement below is correct.
(A) The table is not proportional because the unit rate is not constant.
(B) The table is proportional and the unit rate is $1/13$
(C) The table is proportional and the unit rate is 13.
(D) None of above
62. About how many more students in the sixth grade earned between \$400 and \$599 than seventh grade?
(A) 18
(B) 16
(C) 4
(D) 34

63. It discusses thoroughly the results from the gathered data, usually presented in table and paragraph form.
(A) Conclusion
(B) Findings
(C) Literature review
(D) Questionnaire
64. Look at the table on your sheet for questions 15-21. What is the half-life of iodine-125?
(A) 60 days
(B) 120 days
(C) 180 days
(D) 240 days
65. Is the given table a proportional relationship? If so, what is the constant?
(A) Yes; $\frac{1}{3}$
(B) Yes; 3
(C) Yes; 5
(D) No
66. How many students sold between 11 and 15 candy bars?
(A) 4
(B) 6
(C) 8
(D) None of above
67. Nancy can type 50 words per minute. Look at the table below to write an equation that matches the data.
(A) $M=50 + w$
(B) $W= 50m$
(C) $W= 50 + m$
(D) $M= 50-w$
68. What is the rule for the table shown?
(A) Plus 5
(B) Minus 3
(C) Times 2
(D) Plus 1
69. On a number chart, if we want to add 1, we need to move ____
(A) To the left
(B) To the right
(C) Down
(D) Up
70. Which equation matches the table?
(A) $Y = 3x + 9$
(B) $Y = x + 9$
(C) $Y = x + 3$
(D) $Y = 12x-3$
71. A table displays the number of pets owned by students. If 5 students own dogs, 3 students own cats, and 2 students own birds, how many students own dogs?
(A) 2
(B) 3
(C) 5
(D) 10
72. The 6th grade took a field trip to the movies. The table shows the price of popcorn based on the quantity purchased. How much would it cost for 20 bags of popcorn?
(A) 50
(B) 55
(C) 60
(D) 65
73. A table of values for x and y is shown below. Which rule can be used to describe the relationship between x and y in the table?
(A) Multiply by 3 and subtract 2
(B) Multiply by 2 and add 1
(C) Multiply by 2 and add 3
(D) Multiply by 3 and add 2
74. The table above shows the annual expenses of a company for a period of five years. What was the average salary for these five years?
(A) 14,000,000
(B) 15,000,000
(C) 16,000,000
(D) 17,000,000

75. How many more pizzas did Little Secrets Pizza and Uncle John's Pizza sell than Pizza House and Domiano's Pizza?
- (A) 10
(B) 30
(C) 50
(D) 100
76. What command will combine multiple cells in a table?
- (A) Unmerge.
(B) Combine.
(C) Properties.
(D) Merge.
77. As part of a visit, a veterinarian weighs each dog brought to her clinic. At the end of each day, she records each dog's weight. The weights of the dogs brought to her clinic on Tuesday are shown in the table. How many observations were taken?
- (A) 34
(B) 3
(C) 10
(D) 31
78. Study the example. Which of the following is displayed?
- (A) Map
(B) Chart
(C) Table
(D) Function
79. Which of the following equations expresses the relationship between x and y in the table?
- (A) $y = 10x + 1$
(B) $y = 2x - 1$
(C) $y = -x + 45$
(D) $y = -3x + 53$
(E) $y = -7x + 81$
80. A simple table is also called a:
- (A) One-way table
(B) Two-way table
(C) Three-way table
(D) None of the above
81. According to the table, what is the relative frequency of Students ages 14-17 who skip breakfast?
- (A) About 27%
(B) About 35%
(C) About 15%
(D) About 30%
82. Based on this table, what is the highest score?
- (A) A
(B) B
(C) C
(D) D
(E) E
83. What is the name of the list of information used in graphs?
- (A) Table of Data
(B) Table of Contents
(C) Dining Table
(D) Center Table
84. Solve for B in the table.
- (A) $B = 40$
(B) $B = 10$
(C) $B = 9$
(D) $B = 45$
85. Multiple rows can be added in a table.
- (A) True
(B) False
86. Mario compares random download times of movies from three different services using the table. Which service provides the fastest mean download speed?
- (A) WhoKnew
(B) Amazing Prime
(C) Peach TV
(D) Netflix

87. Ernesto's group has made a massive spreadsheet containing data from several sources. Which feature could the group use to easily sort a series of data to help improve their understanding of the information?
- (A) Chart
(B) Function
(C) Range
(D) Table
88. Which of the following allows a user to easily sort multiple series of data?
- (A) Fill handle
(B) Table
(C) Chart
(D) Function
89. How many more students like chocolate than mint choc. chip and strawberry combined?
- (A) 14
(B) 6
(C) 20
(D) 34
90. Look at the four tables of data. Each table could be used to produce a frequency diagram. For which table would a false origin along the horizontal axis be required?
- (A) A
(B) B
(C) C
(D) D
91. A student constructs a table of distances and times. Using the data, which section of the table represents the highest average speed?
- (A) Section A
(B) Section B
(C) Section C
(D) Section F
92. How many more parks had 40-49 trees planted than 10-19 trees planted?
- (A) 12
(B) 15
(C) 18
(D) 3
93. How many parks have more than 40 trees?
- (A) 26
(B) 31
(C) 17
(D) 22
94. Which of the tables above are proportional?
- (A) Table 5 only
(B) Tables 5 and 8
(C) Tables 6 and 7
(D) None of the tables are proportional.
95. The data in the table represents a proportional relationship. What is the constant?
- (A) $k = \frac{1}{4}$
(B) $k = 9$
(C) $k = 8$
(D) $k = 4$
96. Alberto ran for exercise every day for 16 days. The table shows how many days he ran each distance. Which dot plot represents these data?
- (A) Option A diagram
(B) Option B diagram
(C) Option C diagram
(D) Option D diagram
97. How many students like tennis or football the most?
- (A) 100
(B) 120
(C) 140
(D) 150
98. Data that is organized and presented in rows and columns
- (A) Table
(B) Horizontal axis
(C) Data
(D) Tally chart

99. In a table, columns go
(A) Up and down
(B) Right to Left
(C) There are no columns in tables
(D) All of the above
100. What proportion of brown-eyed students selected female?
(A) $\frac{16}{36}$
(B) $\frac{16}{32}$
(C) $\frac{36}{64}$
(D) $\frac{20}{36}$
101. What is the total number of students who were born in January, June and July?
(A) 18
(B) 19
(C) 20
(D) 21
102. How many more students had an ACT composite score between 15 and 20 than had a composite score between 30 and 35?
(A) 2
(B) 5
(C) 7
(D) 12
103. How many fewer students spent between 30-45 minutes studying than between 50-70 minutes?
(A) 16 students
(B) 19 students
(C) 3 students
(D) 1 student
104. From the frequency table, what is the total number of books checked out over the week?
(A) Total number of books checked out is X.
(B) Total number of books checked out is W.
(C) Total number of books checked out is Z.
(D) Total number of books checked out is Y.
105. How many columns would the data table from which this graph comes have?
(A) Two
(B) Three
(C) Four
(D) None of these answers
106. The table shows the number of each type of animal at a refuge. Determine the relative frequency for the cheetah.
(A) 45%
(B) 25%
(C) 50%
(D) 30%
107. Text in a column is generally aligned ____
(A) Justified.
(B) Right.
(C) Centre.
(D) Left.
108. An odometer in a car tells the number of miles a car has been driven. The odometer on Mr. Graham's new car read 13 miles when he bought it. The relationship between the number of miles Mr. Graham has driven since he bought the car, x , and the number of miles on the odometer, y , is represented by the equation $y = x + 13$. Which table represents this relationship?
(A) Table A
(B) Table B
(C) Table C
(D) Table D
(E) Table E
109. Which table of values has a constant of proportionality of 2?
(A) Table A
(B) Table B
(C) Table C
(D) Table D
110. The stub of a table refers to:
(A) Title

- (B) Headnote
(C) Row headings
(D) Footnote
111. In which week did bobby plant the fewest trees? How many did he plant that week?
(A) Week 2, 14 trees
(B) Week 4, 10 trees
(C) Week 1, 6 trees
(D) None of these
112. Does the table represent a proportional relationship?
(A) Yes.
(B) No.
113. How many trouts weighed MORE THAN 450 grams?
(A) 8
(B) 14
(C) 11
(D) 10
114. According to the data in the table, how many leaves would be included on a stem and leaf plot?
(A) 15
(B) 5
(C) 3
(D) None of above
115. The data table below shows that as the pressure of a gas sample was changed, the volume of the gas changed. The pressure was measured in atmospheres (atm) and the volume was measured in milliliters (mL). According to the data table, as the pressure of the gas increases, the volume of the gas:
(A) Decreases
(B) Increases
(C) Remains the same
(D) None of above
116. In how many games did the team score more than 20 points?
- (A) 8
(B) 7
(C) 10
(D) 9
117. How many employees have a salary less than \$22,000?
(A) 50
(B) 350
(C) 0
(D) 10
118. Look at the tally chart. How many more people rented cartoons than adventure movies?
(A) 22
(B) 14
(C) 8
(D) 6
119. A horizontal line of data in a table
(A) Row
(B) Column
(C) Vertical axis
(D) Horizontal axis
120. What fraction of the total mass of items is the mass of chocolates?
(A) $\frac{4}{12}$
(B) $\frac{2}{3}$
(C) $\frac{1}{4}$
(D) $\frac{1}{12}$
121. Find the fraction of students that are female AND over 1.2 meters tall.
(A) $\frac{9}{28}$
(B) $\frac{9}{20}$
(C) $\frac{9}{34}$
(D) $\frac{17}{28}$
122. Based on the average annual salaries in the table, how much more would an accountant earn than a tax preparer over a 30-year career
(A) \$112,740
(B) \$3,382,200
(C) \$880,200
(D) \$1,251,00

123. Which of the tables above represents a proportional relationship?
(A) A & c
(B) A, b & c
(C) A, c & d
(D) All of them
124. Which of the following is a basis of classification of a table?
(A) Purpose
(B) Construction
(C) Originality
(D) All of these
125. The table shows the number of line segments needed to draw different numbers of hexagons. How many line segments are needed to draw 3 hexagons?
(A) 27
(B) 20
(C) 7
(D) 18
126. The table shows how the heights of two trees are changing over time. Which best describes the relationship shown in the table?
(A) Tree X growing 2 feet more each year than tree Y.
(B) Tree Y is growing 1 foot more each year than tree X.
(C) The height of tree X is 3 feet greater than the height of tree Y every year.
(D) The height of tree Y is 2 feet greater than the height of tree X every year.
127. Craig is making three recipes for his party. He has a container of flour on his kitchen scale. The table shows the total change in weight of the flour on the scale after each of the three recipes. What is the average change in the amount of flour, in ounces, used in the three recipes?
(A) $-3\frac{1}{3}$
(B) 2
(C) -10
(D) -3.3
128. Which graph correctly shows the information in the data table?
(A) A
(B) B
(C) C
(D) None of above
129. A table shows information about several traits displayed by groups of plants. According to the table, which two species are most closely related?
(A) Gingko & Spruce
(B) Gingko & Wheat
(C) Wheat & Ferns
(D) Ferns & Liverworts
130. According to the table, how many people in this sample have a Law degree?
(A) 2 people
(B) 3 people
(C) 4 people
(D) 7 people
(E) 10 people
131. How long does it take for ice to melt according to the table?
(A) 75 seconds
(B) 92 seconds
(C) 55 seconds
(D) 64 seconds
132. A complex table presents:
(A) One characteristic
(B) Two characteristics
(C) Three or more characteristics
(D) Only qualitative data
133. Which month has the highest sale in hats
(A) January
(B) February
(C) April
(D) May

134. The test scores for 10 students taking a 50-question math test are shown in the table above. What is the mean (average) test score for the 10 students?
- (A) 46.0%
(B) 91.8%
(C) 92.0%
(D) 92.2%
- Tags: TEKS.MATH.6.12C
135. Which of the following guarantees a table will not be a function?
- (A) A x value repeats
(B) An y value repeats
(C) An x value repeats and has different y values
(D) A y value repeats and has different x values

1.4.2 Bar Chart Data Interpretation

- The bar graph below shows the names and the number of home runs for 6 players who have hit the most home runs in the World Series. Based on the data in the bar graph, how many home runs did these 6 players hit in the world series?
(A) 70
(B) 60
(C) 74
(D) 76
- Dynamic bar charts contain:
(A) Data points across a period of time—for example 24 hours from 12 am to 12pm, 10 years from 2000 to 2010 or days from Friday to Sunday.
(B) Data points belonging to either a single time frame—such as one year, one month etc.—or have no time reference at all.
- The bar graph shows the scores Brett obtained in his end of year exams. How many more did Brett score in his best subject than in his worst subject?
(A) 25
(B) 35
(C) 45
(D) 60
- This bar chart is about penguins.
(A) False
(B) True
- What might be a reason for using a larger scale on the vertical axis, such as from 0 to 100, in a bar graph?
(A) To make the graph look more impressive
(B) To accommodate larger data values
(C) To confuse the reader
(D) To make all bars appear the same height
- Which of the following bar charts represents a bimodal distribution?
(A) A bar chart with two peaks of equal height.
(B) A bar chart with one peak.
(C) A bar chart with three peaks.
(D) A bar chart with no peaks.
- Which of the following is not true about bar charts?
(A) The y-axis always have the manipulated variable
(B) The bars are always equal in width
(C) The bars are always equally spaced
(D) The responding variable is always given a suitable scale
- In a bar chart comparing the average temperatures of different cities, what does the height of each bar represent?
(A) The population of the city
(B) The average temperature
(C) The altitude of the city
(D) The area of the city
- A bar chart is to be created using the table of data. When constructing the vertical axis of the graph, what is the least value the axis needs to go up to?
(A) 5
(B) 13

- (C) 18
(D) 11
10. Which type of graph is mentioned in the objectives?
(A) Pie chart
(B) Histogram
(C) Bar chart
(D) Scatter plot
11. The bar graph shows pizza toppings students enjoy. Which circle graph displays the same data?
(A)
(B)
(C)
(D)
12. Based on the bar graph, how many more students take the bus than car?
(A) 25
(B) 35
(C) 10
(D) 15
13. Look at the Bar Graph, "Student Grades". What grade did the most students get?
(A) A
(B) B
(C) C
(D) D
14. Look at the Bar Graph "Student Grades". Which grade did the smallest number of students get?
(A) A
(B) B
(C) C
(D) D
15. A recent survey of birthdays at RJH resulted in the data in the bar graph above. Based on the data, if 800 people were surveyed, about how many more people can be expected to have June birthdays than March birthdays?
(A) 100
(B) 8
(C) 225
(D) 60
16. How can you tell which category has the highest value in a bar chart?
(A) The width of the bar shows the highest value category.
(B) The tallest bar indicates the highest value category.
(C) The color of the bar determines the highest value category.
(D) The shortest bar indicates the highest value category.
17. Sneha inserted a bar chart. She noticed that the chart has unnecessary gridlines that make it confusing. To make the chart clearer, what should she do?
(A) Change Chart Type
(B) Remove Gridlines
(C) Change Data Source
(D) Edit Legend
18. The bar chart shows the number of markers sold, how many markers were sold on Mondays and Thursday altogether?
(A) 60
(B) 160
(C) 180
(D) 80
19. The bar chart shows the different numbers of male and female engineering students in three separate years.
(A) True
(B) False
20. The bar chart shows the favourite type of television programmes of a group of children. Which is the most popular type of television programme?
(A) Horror
(B) Documentary
(C) Cartoon
(D) Comedy

21. What are the categories of data in a bar chart?
(A) Categories and values
(B) Labels and frequencies
(C) Axes and legends
(D) Colors and shapes
22. A bar chart shows the number of metres run by four students: Anna (200), Ben (150), Chloe (250), Daniel (100). Who ran the furthest?
(A) Anna
(B) Ben
(C) Chloe
(D) Daniel
23. What are some common ways to compare bar charts?
(A) Comparing the colors of the bars, comparing the widths of the bars, and comparing the labels of the bars.
(B) Comparing the heights or lengths of the bars, comparing the values represented by the bars, and comparing the patterns or trends shown by the bars.
24. The bar chart shows a ____ in car sales in 2020, after several years of consistent growth.
(A) Decline
(B) Peak
(C) Stagnation
(D) None of above
25. The bar graph shows the number of animals sold at a pet store in one week. How many total animals were sold?
(A) 225
(B) 315
(C) 265
(D) 325
26. In an energy bar chart, what does a decrease in the height of the thermal energy bar indicate?
(A) A decrease in temperature
(B) An increase in temperature
(C) A decrease in kinetic energy
(D) An increase in potential energy
27. What is the primary purpose of a bar chart or bar graph?
(A) To draw pictures of objects
(B) To compare and contrast values in relation to each other
(C) To list items in alphabetical order
(D) To show a timeline of events
28. In a momentum bar chart, what does a taller bar indicate?
(A) Greater mass
(B) Greater velocity
(C) Greater momentum
(D) Greater acceleration
29. The Products Sold column chart above compares the sales of GY Music Stores against the sales of Notes Online. To indicate the sales amounts in the plot area, which feature was used?
(A) Axis Title
(B) Data Label
(C) Data Series
(D) Legend
30. A chart shows David 3, Edward 6, Fred 4 goals. Which comparison is accurate?
(A) Fred's bar equals Edward's bar
(B) David's bar is tallest among them
(C) Edward's bar is tallest among them
(D) Fred's bar is taller than Edward's
31. The pictogram shows the number of burgers sold in a fast-food restaurant at lunch. Which is the least popular burger?
(A) Lamb burger
(B) Vegetarian burger
(C) Beef burger
(D) Fish burger
32. What can you conclude from this bar graph?
(A) There are $\frac{1}{2}$ as many Larch as Fir trees
(B) There are more Beech trees than Oak

- (C) There are twice as many Oak trees as Maple trees
(D) There are fewer Oak trees than Beech trees
33. Describe this bar chart.
(A) The main aspect of this bar graph is the continuous decrease.
(B) Overall, the number of electric cars gradually declined.
(C) In general, electric car sales doubled each year
(D) There was an upward trend in the number of electric car use throughout the time period.
34. Miss Lee's science class collected data on the color of 3rd grade student's eyes. The students created a bar graph with this information. How many more students had blue eyes than green eyes?
(A) 80
(B) 50
(C) 30
(D) 20
35. What did I forget to put on this bar graph?
(A) The scale
(B) The titles
(C) The pictures
(D) The key
36. Which month on the graph was Dillon late to school the fewest times?
(A) November
(B) December
(C) February
(D) March
37. Identify the type of chart
(A) Line graph
(B) Pie chart
(C) Bar chart
(D) Map
38. Study the bar graph. Which city has shown the slowest population growth since 1950?
(A) City A
(B) City B
(C) City C
(D) City D
39. A bar chart shows the number of books read by four students in a month: Alice (8), Ben (12), Charlie (5), and Daisy (10). Who read the most books?
(A) Alice
(B) Ben
(C) Charlie
(D) Daisy
40. How many teas were sold according to the bar chart?
(A) 18
(B) 8
(C) 12
(D) 22
41. What is a title for this bar graph?
(A) Art Tools We Like
(B) Our Favorite Foods
(C) Colors We Like
(D) None of above
42. Katie is reading a 200-page book that is divided into 5 chapters. The bar graph shows the number of pages in each chapter. What percent of the pages is in even-numbered chapters?
(A) 50%
(B) 15%
(C) 35%
(D) 70%
43. Study the following graph carefully to answer the questions that follow: Number of Girls and Boys Participating in a Rally From Five Different Schools What is the total number of girls participating in the rally from schools A and B together?
(A) 825

- (B) 875
(C) 1000
(D) None
44. A shopkeeper wants to compare the sale of ice-cream cones and cold drink bottles. He made the bar charts shown to represent their sale. On how many days was the number of cold drinks sold GREATER than the number of ice cream cones sold?
(A) 1 day
(B) 2 days
(C) 3 days
(D) 4 days
45. In a column chart, the vertical axis is usually called the:
(A) Value Axis
(B) Category Axis
(C) Legend
(D) Data Label
46. The graph shows how employees at Disney World travel to work. How many employees ride bikes, ride the bus, or walk to work?
(A) 300
(B) 450
(C) 325
(D) 375
47. Read the bar chart. The largest amount of cola was sold on ____
(A) Sunday
(B) Monday
(C) Saturday
(D) Thursday
48. Liz read *Island of the Blue Dolphins* over spring break. The table shows how many pages she read on each day. Which bar graph represents the data in the table?
(A)
(B)
(C)
(D)
49. Based on the bar chart above, most of the people like to use ____
(A) TV
(B) Telephone
(C) Radio
(D) Computer
(E) Ipod
50. This is a ____ bar chart.
(A) Vertical
(B) Horizontal
51. What is the recommended word count for writing about a bar chart?
(A) At least 200 words
(B) At least 250 words
(C) At least 150 words
(D) At least 100 words
52. A Pareto chart is a ____
(A) Bar chart where the bars are arranged in descending order by frequency
(B) Bar chart where the bars are arranged in ascending order by frequency
(C) Pie chart where the slices are arranged in descending order by angle
(D) Pie chart where the slices are arranged in ascending order by angle
53. In an energy bar chart, what does a longer bar represent?
(A) More energy
(B) Less energy
(C) Equal energy
(D) No energy
54. The table shows how third grade students voted in a survey that asked about their favorite breakfast cereal. Which bar graph represents the data in the frequency table?
(A)
(B)
(C)
(D)

55. If the bar for Brown is 4 units high and each unit represents 1 pet, how many pets does Brown have?
- (A) 2
(B) 3
(C) 4
(D) 5
56. What type of chart is useful for comparing values over categories?
- (A) Pie Chart
(B) Column Chart
(C) Line Chart
(D) Dot Graph
57. Which bar chart correctly represents the frequency table below?
- | Value | Frequency |
|-------|-----------|
| 2 | 5 |
| 3 | 3 |
| 4 | 6 |
| 5 | 2 |
- (A) A bar chart with bars of heights 5, 3, 6, 2 respectively.
(B) A bar chart with bars of heights 2, 6, 3, 5 respectively.
(C) A bar chart with bars of heights 6, 5, 3, 2 respectively.
(D) A bar chart with bars of heights 3, 5, 2, 6 respectively.
58. A bar graph shows the number of pets owned by students. If the bar for dogs is twice as high as the bar for cats, what can be inferred?
- (A) Twice as many students own dogs than own cats.
(B) Dogs are twice as popular as cats.
(C) Students prefer dogs over cats.
(D) Each student owns two dogs for every cat.
59. A bar chart shows goals scored: Alex 7, Jordan 4, Taylor 9. Who scored the fewest goals?
- (A) Alex scored the fewest
(B) Jordan scored the fewest
(C) Taylor scored the fewest
(D) All scored equally few
60. In a bar chart, what does the length of each bar represent?
- (A) The length of each bar in a bar chart represents the value of the data it represents.
(B) The length of each bar represents the temperature outside
(C) The length of each bar represents the number of people in the bar
(D) The length of each bar represents the time of day
61. Which graph best shows the number of students who got B as a final grade?
- (A) Bar Graph
(B) Pie Chart
62. Look at the bar graph. Can you tell what the bar graph measures?
- (A) Kilowatts used by appliances per day
(B) Average Hours appliances were used per day
(C) Number of hours each appliance was used per day
(D) Hours appliance used monthly
63. Cypress Middle School held a fundraiser for a school dance. Three teams (baseball, soccer, and volleyball) and three clubs (ecology, science, and math) collected money. The results of the fundraiser are shown in the bar graph below. About what percent of the money raised was collected by clubs?
- (A) 6%
(B) 47%
(C) 75%
(D) 53%
64. Look at the bar graph. Which tally chart matches the data on the bar graph?
- (A) A
(B) B
(C) C
(D) D
65. A bar chart shows the number of ounces of juice drunk by four children: Emily (8), Jack (12), Sophie (10), and Oliver (6). Who drank the second most?

- (A) Emily
(B) Jack
(C) Sophie
(D) Oliver
66. On a bar chart where each unit on the y-axis equals 1, how tall should Brianna's bar be if she read 9 books?
(A) 10 units tall
(B) 8 units tall
(C) 9 units tall
(D) 7 units tall
67. Graph D is called what?
(A) Histogram
(B) Line graph
(C) Line plot
(D) Bar graph
68. If the bar for Ben is 150 units high and each unit represents 1 metre, how far did Ben run?
(A) 100 metres
(B) 150 metres
(C) 200 metres
(D) 250 metres
69. From the bar chart, how many pets do the girls in the class have?
(A) 19
(B) 12
(C) 7
(D) You can't tell
70. How many stars are shown on the bar chart?
(A) 7
(B) 3
(C) 6
(D) 5
71. We have two types of 'bar chart'
(A) Dynamic and Static Bar Graphs
(B) Horizontal and vertical bars
72. Which chart would I use to show how Team Teachers beat Team Students in the bowling tournament?
(A) Column
(B) Xy scatter
(C) Pie
(D) Line
73. What command would you use to create a bar chart in Matplotlib?
(A) `Plt.plot(x, height)`
(B) `Plt.bar(x, height)`
(C) `Plt.scatter(x, height)`
(D) `Plt.hist(x, bins)`
74. A class of students was asked how many hats they owned. Their answers are recorded in the column graph. How many students are in the class?
(A) 26
(B) 34
(C) 21
(D) None of above
75. When reading a bar graph, what does the height of each bar represent?
(A) The frequency of the data
(B) The type of data
(C) The time interval
(D) The color of the data
76. The graph above measures the full-price sales for two different newspapers. The bars of the graph make it look like The Daily Review made over twice as many sales as The Global Gazette. Was that actually the case? Why or why not?
(A) Yes
(B) NoTagsTEKS.MATH.6.4B
77. What does the scale on the left beginning with 0 and ending with 7 represent?
(A) Number of students selling candy
(B) Number of cases of candy sold
(C) Number of candy each month
(D) Number of days each month that candy was sold

78. The teachers at Marty's school are in a pasta-cooking contest. The bar graph shows the amounts of sauce they use in their recipes. What is the difference between the greatest and least amounts of sauce?
- (A) 8
(B) 6
(C) 3
(D) 5
79. Choose the best introductions (2 ANSWERS).
- (A) The bar chart illustrates how many vegetables were sold by Frank
(B) The bar chart explains how veggies are sold on farms to the public.
(C) The bar chart represents the amount (in pounds) of vegetables sold on Frank's farm in three days.
(D) The bar chart gives information about the number of vegetables bought from Frank's stall over the course of three days.
80. The chart in the picture is a ____
- (A) Pie Chart
(B) Line graph
(C) Bar Chart
(D) Table
81. If a bar graph shows that the bar for "Juice" reaches up to 7 on the vertical axis, what does this indicate?
- (A) 7 different types of juice were surveyed
(B) 7 students chose juice as their favorite drink
(C) Juice is the least favorite drink
(D) Juice was not included in the survey
82. The bar graph shows the number of books read by students in a month. If the bar for Sarah is at 8, what does this number represent?
- (A) Sarah read 8 pages.
(B) Sarah read 8 books.
(C) 8 students read as many books as Sarah.
(D) Sarah read books on 8 different days.
83. How can we use the graph to find out how many blue marbles are in the bag?
- (A) By looking at the empty space above the bar for the color blue
(B) By counting the number of lines on the graph
(C) By looking at how long the bar is above the color blue
(D) None of above
84. According to this chart, which band sold the most albums?
- (A) Doug and the Slugs
(B) Gails and the Snails
(C) Sherm and the Worms
(D) Marva and the Larva
85. Illustrates comparisons among individual items
- (A) Bar
(B) Column
(C) Line
(D) Xy scatter
86. The bar graph shows the numbers of pets in Joy's Pet Shop.
- (A) True
(B) False
87. Look at the double Bar Graph. What ice cream flavour do children dislike the most?
- (A) Mango
(B) Vanilla
(C) Chocolate
(D) Almond
88. The graph shows how many pencils, erasers, and pens were sold on the first day of school at the school store. Using the graph, what is the total number of pencils and pens sold on the first day of school at the school store?
- (A) 30
(B) 40
(C) 70
(D) 90

89. Which component tells readers what the entire bar chart is about?
- (A) The grid background lines
 - (B) The legend of colors
 - (C) The y-axis tick marks
 - (D) The chart title at the top
90. A practice problem reports a bar length of 5 units. What does a unit mean here?
- (A) A color category name
 - (B) A standard measurement on scale
 - (C) A fixed width segment
 - (D) A title word count
91. When comparing the performance of sales across different regions, which chart type is MOST suitable?
- (A) Scatter Plot
 - (B) Pie Chart
 - (C) Bar Chart
 - (D) Line Chart
92. In the second example, how can you determine the number of pounds of sweet potatoes sold using the bar graph?
- (A) By guessing based on the graph's title
 - (B) By counting the number of bars on the graph
 - (C) By looking at where the bar for sweet potatoes stops on the vertical scale
 - (D) By checking the color of the bar
93. Leon makes a bar graph of the favorite cheese data in the frequency table. How many bars will the graph have?
- (A) 12 bars
 - (B) 3 bars
 - (C) 4 bars
 - (D) 2 bars
94. According to the same bar chart, how many more books did Daisy read than Charlie?
- (A) 3
 - (B) 5
 - (C) 7
 - (D) 10
95. What is the key term for Column Charts?
- (A) Comparisons
 - (B) Percentages
 - (C) Contribution to a whole
 - (D) Percentages with emphasis
96. List the age intervals in each blank along the horizontal axis.
- (A) 0-14, 15-29, 30-44, Over 44
 - (B) 10-20, 21-30, 31-40, 41-50
 - (C) 0-5, 6-10, 11-15, 16-20
 - (D) 5-15, 16-25, 26-35, Over 36
97. Which of the following statements is true about bar charts?
- (A) Bar charts can only represent categorical data.
 - (B) Bar charts can represent both categorical and numerical data.
 - (C) Bar charts can only represent numerical data.
 - (D) Bar charts cannot represent data distributions.
98. How does this graph show which sport is the favorite?
- (A) Number of people
 - (B) Number of clubs that play that sport
 - (C) Color of the sports bar on the graph
 - (D) Number of people who say they like the sport
99. Look at the graph. How many students are 55 inches or taller in height?
- (A) 4
 - (B) 7
 - (C) 13
 - (D) 20
100. Look at the bar chart, "Nicest Fruit". What scale does the bar graph use?
- (A) 1
 - (B) 2
 - (C) 5
 - (D) 10

- 101.** What is the purpose of the overview section in a bar chart description?
- (A) To summarize key trends and insights from the data presented in the bar chart.
 - (B) To list the sources of the data used in the chart.
 - (C) To provide a detailed analysis of each individual bar.
 - (D) To explain the methodology behind the data collection.
- 102.** A bar chart shows the number of books read by students in four classes: 10, 15, 12, and 8. What is the total number of books read?
- (A) 45
 - (B) 40
 - (C) 35
 - (D) 30
- 103.** A chart lists: Pens 5, Pencils 11, Erasers 8. The pencil bar is drawn shorter than the eraser bar. Is that correct?
- (A) No, because 11 should be taller
 - (B) No, because bars must be equal width
 - (C) Yes, because labels can vary
 - (D) Yes, because 11 is less than 8
- 104.** A bar graph shows the number of apples sold by a store each day of the week. If the store sold 50 apples on Monday, 75 apples on Wednesday, and 30 apples on Friday, on which day did the store sell the most apples?
- (A) Monday
 - (B) Wednesday
 - (C) Friday
 - (D) The store sold the same number of apples each day
- 105.** Is this a Bar chart or Pictogram?
- (A) Pictogram
 - (B) Bar chart
- 106.** A bar graph shows the number of pets owned by students. If 5 students own dogs and 3 own cats, how many students own pets in total?
- (A) 10
 - (B) 4
 - (C) 6
 - (D) 8
- 107.** The bar chart illustrates that the expenditure on education was ____ higher in 2020 compared to 2010.
- (A) Significantly
 - (B) Marginally
 - (C) Negligibly
 - (D) None of above
- 108.** Which among the food in the graph had the least percent of sugar content?
- (A) Ketchup
 - (B) Cracker
 - (C) Chocolate bar
 - (D) Soda
- 109.** A bar chart shows the number of points scored by four teams: Red (18), Blue (22), Green (20), Yellow (16). Which team scored the second highest?
- (A) Red
 - (B) Blue
 - (C) Green
 - (D) Yellow
- 110.** What information is needed to complete the bar graph?
- (A) The number of students who ride the bus to school
 - (B) The number of students who ride in a car to school
 - (C) The way exactly 3 students get to school
 - (D) The way exactly 6 students get to school
- 111.** Explain the process of choosing the appropriate color scheme for a bar chart.
- (A) Consider the data, audience, and design aesthetic
 - (B) Select colors that clash with the data and make it difficult to interpret
 - (C) Pick colors randomly without any consideration

- (D) Choose colors based on personal preference only
- 112.** A bar graph should always include a title.
- (A) True
 - (B) False
- 113.** From the bar chart how many men in total took part in the survey?
- (A) 10
 - (B) 6
 - (C) 16
 - (D) 17
- 114.** Amount of Votes for Joe Biden VS Donald Trump
- (A) Bar chart
 - (B) Line graph
- 115.** Which is the most useful visualization for visualizing multiple different categories of data all at once?
- (A) Bar Chart
 - (B) Pie Chart
 - (C) Histogram
 - (D) Line Chart
- 116.** When analyzing trends in bar charts, it is important to pay attention to the ____ of the bars.
- (A) Color
 - (B) Width
 - (C) Height or length
 - (D) Spacing
- 117.** A bar chart shows the number of miles cycled by four friends in a week: Tom (15), Harry (20), Sam (10), and Lucy (25). Who cycled the least?
- (A) Tom
 - (B) Harry
 - (C) Sam
 - (D) Lucy
- 118.** The graph below shows the number of sunny days and rainy days in a city during four months. Based on the graph, how many more sunny days than rainy days did this city have during the months of April, May, and June?
- (A) 21
 - (B) 56
 - (C) 26
 - (D) 20
- 119.** The chart shows the type of sandwiches chosen by office workers. How many more people chose cheese than tuna?
- (A) 9
 - (B) 4
 - (C) 5
 - (D) 10
- 120.** Leigh Ann designed a bar chart and would like to add an element to the right of the chart that identifies each bar's color. Which chart feature would she need to include?
- (A) Axis
 - (B) Chart Title
 - (C) Data Label
 - (D) Key / Legend
- 121.** The bar graph is given below shows the per gram rate of Carbon and Oxygen on various days. Read the data carefully and answer the given question. 2) Average per gram price of Oxygen on all four days together is how much more than the average per gram price of Carbon on all four days together?
- (A) 100
 - (B) 175
 - (C) 125
 - (D) 150
- 122.** A bar chart has been created using the table of data. Which bar has been plotted at the incorrect height?
- (A) A
 - (B) C
 - (C) B
 - (D) D

123. The bar graph shows the number of hamburgers sold at Bob's Burger Shack. On which days were more than 80 hamburgers sold?
- (A) Wednesday and Friday
 - (B) Tuesday and Thursday
 - (C) Monday, Tuesday, and Thursday
 - (D) Tuesday, Wednesday, Thursday, and Friday
124. Based on the bar graph showing sales over 5 months, which month had the highest sales?
- (A) Month Z
 - (B) Month X
 - (C) Month Y
 - (D) Month W
125. What are the trends of this bar chart?
- (A) Boys do more of each activity than girls
 - (B) Girls do more of each activity than boys
 - (C) Both genders prefer watching Tv and playing games.
 - (D) Both genders prefer bike riding.
126. The bar graph given below shows the foreign exchange reserves of a country(in million US \$) from 1991-1992 to 1998-99. Answer the questions based on the graph.1) What was the percentage increase in the foreign exchange reserves in 1997-98 over 1993-94?
- (A) 100
 - (B) 150
 - (C) 200
 - (D) 620
127. Bar charts show the percent of each category
- (A) True
 - (B) False
128. Marketing analyst Alex needs to illustrate in a single chart how each product line's monthly sales figures compare throughout the last year. Which chart should Alex select for a clear visual comparison of the two product lines across the same time period?
- (A) Stacked Bar Chart
 - (B) Clustered Bar Chart
 - (C) Area chart
 - (D) Pie Chart
129. From the bar chart, how many pets do the boys in the class have?
- (A) 19
 - (B) 12
 - (C) 7
 - (D) You cannot tell
130. What does Task 1 test your ability to do?
- (A) Perform calculations based on the bar chart
 - (B) Identify the most important and relevant information and trends in a bar chart
 - (C) Identify irrelevant information in a bar chart
 - (D) Provide personal opinions about the bar chart
131. Which of the following is a correct interpretation of a bar chart with a single peak?
- (A) The data is uniformly distributed.
 - (B) The data has a normal distribution.
 - (C) The data is bimodal.
 - (D) The data is skewed.
132. A bar chart shows pets owned: Dogs: 12, Cats: 7, Fish: 5. Which statement correctly compares bar heights?
- (A) Cats bar shorter than Dogs bar
 - (B) Dogs bar same height as Fish bar
 - (C) Cats bar taller than Dogs bar
 - (D) Fish bar taller than Cats bar
133. How can you compare two sets of data using a bar graph?
- (A) You should use a line graph instead of a bar graph for comparison.
 - (B) You can only compare data sets with the same number of bars.
 - (C) You can compare two sets of data by using a bar graph with different colors for each set.
 - (D) Bar graphs are only useful for displaying single data sets.

134. Trianna's bookshelf contains 40 mysteries, 30 science fiction books, 10 non-fiction books, 50 comic books, and 5 dictionaries. On a bar graph, what would the y-axis be labeled?
- (A) Types of books
(B) Number of books
(B) 15
(C) 10
(D) 20
135. What is name of the chart pictured below?
- (A) Line Graph
(B) Circle Graph
(C) Bar Graph
(D) Line Plot
136. Now read what's on the horizontal axis, the line that runs along the bottom of the graph from left to right. It is labeled Appliance. Each appliance in the graph has two bars. What is measured by the blue bar?
- (A) Amount of electricity used
(B) Weekday: hours of use
(C) Number of appliances used
(D) Weekend: hours of use
137. When comparing data using bar charts, what should be considered in choosing the scale for the chart?
- (A) The type of paper used for printing the chart
(B) Accurately represent the differences in the data
(C) The font size of the labels
(D) The color of the bars
138. The bar graph shows the usual method of transport to school for the students in a class. How many students are there altogether in the class?
- (A) 20
(B) 21
(C) 22
(D) 23
139. In the given bar graph, what is the percentage increase in the production of blue colored candies from 2017 to 2018?
- (A) 25
(B) 15
(C) 10
(D) 20
140. What should you do when writing about a bar chart?
- (A) Perform calculations to support your points
(B) Choose the points to write about carefully
(C) Include your personal opinion about the data
(D) Write about all the information in the chart
141. What is wrong with this bar graph?
- (A) It has no title and no label on the vertical axis
(B) There should be a space between the bars
(C) The bars should all be the same colour
(D) The scale on the vertical axis is wrong
142. Children voted for their favourite ice cream flavours. How many more people voted for Chocolate than Mint Chocolate Chip?
- (A) 15
(B) 10
(C) 50%
(D) 10%
143. In a horizontal bar chart, which component shows frequency values?
- (A) The legend shows frequency
(B) The y-axis shows frequency
(C) The bar color shows frequency
(D) The x-axis shows frequency
144. A school has a bar graph showing the number of books read by students in each grade. If 30 students in 6th grade read 15 books each, how many books did they read in total?
- (A) 600
(B) 450
(C) 300
(D) 4500

- 145.** The Rough Riders stacked bar chart above was created to represent the total sales of each employee over a four month period. Which feature will make the plot easier to read?
- (A) Axis title
 - (B) Chart title
 - (C) Data series
 - (D) Gridlines
- 146.** A graph in which the bars go up from bottom to top
- (A) Frequency table
 - (B) Picture graph
 - (C) Horizontal bar graph
 - (D) Vertical bar graph
- 147.** Shown below is a visual presentation of the average number of cars produced by factories A, B, and C for a 12-month period in the year 2018 and 2019. By how much larger is the number of cars produced by factory C in 2019 as compared to the number of cars produced by factory A in 2018?
- (A) 20 cars
 - (B) 40 cars
 - (C) 5 cars
 - (D) 80 cars
- 148.** What are the key components of a bar chart?
- (A) The key components of a bar chart include the color, font, and background
 - (B) The key components of a bar chart include the x-axis, y-axis, bars, and title.
 - (C) The key components of a bar chart include the pie chart, legend, and gridlines
 - (D) The key components of a bar chart include the data table, scatter plot, and histogram
- 149.** The dual bar chart shows information about the sandwiches sold. How many more white bread sandwiches were sold than brown bread sandwiches?
- (A) 10
 - (B) 2
 - (C) 9
 - (D) 8
- 150.** A Bar chart has Two Axis, They are-
- (A) A and B Axis
 - (B) C and D Axis
 - (C) P and Q Axis
 - (D) X and Y Axis
- 151.** The dual bar chart shows students favourite core subject. How many students, in total, prefer science?
- (A) 32
 - (B) 51
 - (C) 19
 - (D) 48
- 152.** What is the title of the bar chart
- (A) Rice noodle
 - (B) Numbers
 - (C) Numbers of snacks school canteen sold last tuesday
 - (D) None of above
- 153.** What is the scale of the bar graph?
- (A) 1
 - (B) 2
 - (C) 5
 - (D) 10
- 154.** In the bar chart, each division represents ____ sheets of paper.
- (A) 10
 - (B) 20
 - (C) 50
 - (D) 100
- 155.** The graph shows the number of cars that passed Lisa's house in an hour. How many white cars passed the house?
- (A) 6
 - (B) 5
 - (C) 2
 - (D) 1

156. Look at the bar graph on your sheet for questions 11-14. How long is a half-life for C-14?
- (A) 0 years
 - (B) 5,730 years
 - (C) 5,730 days
 - (D) 10,740 years
157. Best chart to compare sales of products:
- (A) Histogram
 - (B) Bar chart
 - (C) Pie chart
 - (D) Heatmap
158. What does the scale on the side of a bar chart help with?
- (A) Color coding the chart
 - (B) Recording the numerical data
 - (C) Naming the chart
 - (D) Determining the thickness of the bars
159. The bar chart shows the favourite type of television programmes of a group of children. Which is the least popular type of television programme?
- (A) Horror
 - (B) Drama
 - (C) Comedy
 - (D) Documentary
160. In a bar chart, the height of each bar represents the ___ of the data it represents.
- (A) Width
 - (B) Weight
 - (C) Value
 - (D) Color
161. The dual bar chart shows the results of the games for a team in a season. In how many games were the club unbeaten (did not lose)?
- (A) 35
 - (B) 36
 - (C) 37
 - (D) 7
162. Which of the following bar charts would best represent the momentum of different objects?
- (A) A bar chart with mass on the x-axis and velocity on the y-axis
 - (B) A bar chart with velocity on the x-axis and momentum on the y-axis
 - (C) A bar chart with mass on the x-axis and momentum on the y-axis
 - (D) A bar chart with time on the x-axis and momentum on the y-axis
163. Is this a bar chart or Pie Chart?
- (A) Bar Chart
 - (B) Pie Chart
164. If the y-axis is labeled "Number of Students," what does the height of each bar represent?
- (A) The count in each category
 - (B) The category names themselves
 - (C) The bar color meaning
 - (D) The average of all categories
165. Look at the bar chart, "Nicest Fruit". What does the x-axis show?
- (A) Types of fruit
 - (B) The number of people.
166. Which Excel chart type is best suited for comparing individual data points in a category?
- (A) Line chart
 - (B) Bar chart
 - (C) Pie chart
 - (D) Scatter plot
167. Choose the information that best describes this bar chart.
- (A) Far more females than males are interested in vanilla flavor.
 - (B) Slightly more females than males are interested in vanilla flavor.
 - (C) Far more males than females are interested in vanilla flavor.
 - (D) Slightly more males than females are interested in vanilla flavor.

- 168.** The dual bar chart shows the number of students studying a language in Years 10 and 11. Which language represents the mode (most common)?
- (A) Spanish
 - (B) German
 - (C) French
 - (D) None of above
- 169.** What is the keyterm to help you remember Stacked bar Charts?
- (A) Contribution to a whole
 - (B) Percentages
 - (C) Percentages with Emphasis
 - (D) Time
- 170.** The bar graph shows the results when a die was thrown a number of times. How many sixes were thrown?
- (A) 2
 - (B) 3
 - (C) 5
 - (D) 6
- 171.** Look at the bar graph, "Nicest Fruit". What does the y-axis show?
- (A) Types of fruit
 - (B) Number of people.
- 172.** In a bar chart comparing the average temperatures of different cities, which city has the highest average temperature if City A is represented by a bar of 5 cm, City B by 7 cm, City C by 3 cm, and City D by 6 cm?
- (A) City A
 - (B) City B
 - (C) City C
 - (D) City D
- 173.** What is the shape of this bar graph?
- (A) Skew right
 - (B) Skew left
 - (C) Symmetrical
 - (D) Uniform
- 174.** Side Bar Charts: Sylvester plays tennis every year. This year Sylvester's team, Westmoore, came in 1st place. The bar graph below shows how the six teams in the 6A division came out this year after ten matches. How many games separated the first and second place teams?
- (A) 1
 - (B) 3
 - (C) 4
 - (D) 7
 - (E) 5
- 175.** If you want to compare the heights of two bars in a bar chart, what do you look at?
- (A) The width of the bars
 - (B) The colors of the bars
 - (C) The lengths of the bars
 - (D) None of above
- 176.** Which axis of the bar chart above shows the number of members?
- (A) Horizontal
 - (B) Vertical
- 177.** What is important to consider when choosing the scale for a bar chart?
- (A) The width of the bars
 - (B) The greatest number in the data
 - (C) The type of data
 - (D) The color of the bars
- 178.** Look at the bar graph on your sheet for questions 11-14. If a sample known to be 10,740 years old has 400 atoms of C-14, how many atoms of C-14 did it have when it died?
- (A) 200 atoms
 - (B) 400 atoms
 - (C) 800 atoms
 - (D) 1600 atoms
- 179.** A bar chart shows the weights of four parcels: Parcel A (2 lbs), Parcel B (3 lbs), Parcel C (1 lb), Parcel D (4 lbs). Which parcel is the heaviest?
- (A) Parcel A
 - (B) Parcel B
 - (C) Parcel C
 - (D) Parcel D

- 180.** Band members are selling magazines to raise \$150 for a field trip. The bar graph below shows the amount six band members have collected so far. Paul, Jim, and Dan are boys and Jane, Mia, and Bryn are girls. By what percent of the total money raised so far do the girls exceed the boys?
- (A) About 10%
 - (B) About 7%
 - (C) About 20%
 - (D) About 15%
- 181.** A bar chart shows the number of pets owned by four families: Smith (3), Jones (5), Patel (2), and Brown (4). Which family owns the fewest pets?
- (A) Smith
 - (B) Jones
 - (C) Patel
 - (D) Brown
- 182.** The Brink tennis team had a bake sale. Five players from Brink's girls' team sold cupcakes at the sale. The graph below shows their sales with a Bar Graph. How many more dozen did the highest salesgirl sell than the lowest?
- (A) 1 dozen more
 - (B) 2 dozen more
 - (C) 3 dozen more
 - (D) 6 dozen more
- 183.** The bar graph provided gives the sales of books (in 1000s) from six branches of a publishing company during two consecutive years 2000 and 2001. Answer the questions based on the graph: 2) What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?
- (A) 3:5
 - (B) 4:5
 - (C) 5:7
 - (D) 7:9
- 184.** In a horizontal bar chart, which bar represents the greatest amount or value of the data being illustrated?
- (A) The longest bar
 - (B) The shortest bar
 - (C) The bar at the top of the chart
 - (D) The bar at the bottom of the chart
- 185.** If each unit on the y-axis represents 2 students, what height should a bar be to represent 10 students?
- (A) 6 units tall
 - (B) 5 units tall
 - (C) 4 units tall
 - (D) 3 units tall
- Question 1 and 2 are based on the bar chart
1. Choose the correct statement(s).
- (A) The most number of discharged cases was recorded on Tuesday.
 - (B) The number of discharged cases on Monday is more than the number of discharged cases on Tuesday
 - (C) Thursday records the least number of discharged cases
 - (D) The number of discharged cases on Friday is more than 200 cases
- 186.** Susie is conducting an investigation to find out what type of fish are in two ponds near her house. The results are shown in the bar graph below. How many more perch are in Pond 2 than Pond 1?
- (A) 1
 - (B) 10
 - (C) 30
 - (D) 5
- 187.** Favorite colors table: Red 9, Blue 15, Green 6. Which color should have the tallest bar?
- (A) Blue has tallest bar
 - (B) Red has tallest bar
 - (C) Green has tallest bar
 - (D) All bars same height
- 188.** How are the values represented on a bar graph?
- (A) By the shape of the bars
 - (B) By the height or length of the bars

- (C) By the width of the bars
(D) By the color of the bars
- 189.** Number of colour marbles (green, blue, orange) in a box
(A) Bar chart
(B) Line graph
- 190.** Leigh Ann designed a bar chart and would like to add an element above the chart to make the data more meaningful. Which chart feature would she need to include?
(A) Axis
(B) Chart Title
(C) Data Label
(D) Legend
- 191.** A bar graph shows the number of students participating in different clubs. If 12 students are in the art club and 8 in the science club, how many students are in clubs in total?
(A) 20
(B) 22
(C) 15
(D) 18

1.4.3 Line Graph Data Interpretation

- If a line graph shows a steady increase from 2 to 10 over 4 days, what is the average rate of increase per day?
(A) 2
(B) 4
(C) 8
(D) 10
- What is one of the objectives of learning about bar charts and line graphs?
(A) To memorize all types of graphs
(B) To choose the right scale for a graph
(C) To draw graphs without data
(D) To ignore errors in graphs
- A line graph tracks the growth of a plant over 4 weeks. If the plant grew 2 cm in the first week and 3 cm in the second week, how much did it grow in total after two weeks?
(A) 4 cm
(B) 7 cm
(C) 6 cm
(D) 5 cm
- In a line graph, what does the x-axis represent?
(A) The dependent variable
(B) The y-axis
(C) The independent variable
(D) The slope
- Describe the relationship between the data.
(A) Positive Linear
(B) Negative Linear
(C) Non-Linear
(D) No Relationship
- The line graph shows five years of data about a dog. What information does the graph show?
(A) How the mass of the dog changed
(B) How much food the dog consumed
(C) What kinds of food the dog consumed
(D) When the dog was measured each month
- Based on the graph, what do you predict will happen to sales in 2015?
(A) Sales will increase.
(B) Sales will decrease.
(C) Sales will stay the same.
(D) Sales will stop.
- Number of players in a video game over 5 years
(A) Line Graph
(B) Bar Chart
- The line plot shows the lengths of the mealworms in Mrs. Roth's mealworm farm. What is the total length, in inches, of the five smallest mealworms?
(A) $\frac{3}{4}$
(B) 5

- (C) $7/4$
(D) $5/4$
10. What is the minimum value in the data shown on the line graph?
(A) 70
(B) 72
(C) 91
(D) 100
11. According to the graph, in which year was the greatest increase in garbage collected?
(A) 2006
(B) 2007
(C) 2005
(D) 2008
12. How do you read a line graph?
(A) Ignore the axes and focus on colors
(B) Identify axes, read labels, observe trends, and check legends.
(C) Count the number of lines without context
(D) Only look for the highest point
13. Which statement below accurately represents the graph?
(A) \$100 is earned for each hour worked
(B) \$100 is earned for every 2 hours worked
(C) \$500 is earned for every 8 hours worked
(D) \$200 is earned for every 3 hours worked
14. Temperature of water when heated from 0 to 10 minutes.
(A) Line Graph
(B) Bar Chart
15. According to the graph below, how many more pounds of garbage was collected at Cedar Hills in 2008 than in 2004?
(A) 2,000 lbs
(B) 2,750 lbs
(C) 3,000 lbs
(D) 1,000 lbs
16. When analyzing a line graph showing the growth of a bacterial culture over time, what does the slope of the line represent?
(A) The initial population of bacteria
(B) The rate of bacterial growth
(C) The maximum population reached
(D) The time taken to reach maximum growth
17. A line plot shows the number of books read by students in a month. If the line plot has 5 X's at 4 books, what does this indicate?
(A) 5 students read more than 4 books.
(B) 5 students read 4 books each.
(C) 4 students read 5 books each.
(D) 4 books were read by 5 students in total.
18. How can you analyze the trends in a line graph?
(A) By smelling the line graph
(B) By looking for patterns, changes, and relationships between the variables represented on the graph.
(C) By listening to the line graph
(D) By tasting the line graph
19. Terrell hiked 10 miles on Sunday, 8 miles on Monday, 9 miles on Tuesday, 8 miles on Wednesday, 6 miles on Thursday, and 6 miles on Friday. Terrell is crazy, but which line graph correctly shows the data?
(A) Graph A
(B) Graph B
20. Which list of data represents the data on the line plot?
(A) 0, $1/8$, $1/4$, $1/2$, $3/4$, 1
(B) $1/8$, $1/4$, $1/2$, $3/4$
(C) $1/8, 1/8, 1/8, 2/8, 2/8, 2/8, 4/8, 4/8, 4/8, 4/8$
(D) 0, $1/8, 1/8, 1/8, 2/8, 2/8, 2/8, 4/8, 4/8, 4/8, 4/8, 1$
21. For 6 days in a row, Julia measured the depth of the snow in a shaded area of her backyard. The line graph shows her data. Between which

- two days did the depth of the snow decrease the most?
- (A) 1 and 2
 - (B) 2 and 3
 - (C) 4 and 5
 - (D) 5 and 6
22. The following are uses of line graphs EXCEPT
- (A) When you want to show trends. For example, how house prices have increased over time.
 - (B) When you want to make predictions based on a data history over time.
 - (C) When comparing two or more different variables, situations, and information over a given period of time.
 - (D) When showing percentage or proportional data.
23. The graph below shows tidal changes at an ocean beach over a 24-hour time period. What is the approximate time interval between the two high tides?
- (A) 6 hours
 - (B) 9 hours
 - (C) 13 hours
 - (D) 24 hours
24. You would like to track the total amount of monthly sales over the period of a year for three sale people.
- (A) Line Graph
 - (B) Bar Graph
 - (C) Pie Chart
 - (D) Histogram
25. Which month on the graph was gas the least expensive?
- (A) April
 - (B) August
 - (C) October
 - (D) November
26. How many families are represented in the line plot?
- (A) 5
 - (B) 6
 - (C) 17
 - (D) 18
27. Which of the following is NOT a reason to use a line graph?
- (A) To show how something changes over time
 - (B) To compare different categories at one point in time
 - (C) To identify trends
 - (D) To display continuous data
28. What are the advantages of using a line graph for data representation?
- (A) Line graphs are useful for showing trends and changes over time.
 - (B) Line graphs are not visually appealing
 - (C) Line graphs are only useful for showing static data
 - (D) Line graphs are difficult to interpret
29. The graph shows the relationship between the amount of gas in a car's tank after going on a trip. Which is the closest to the amount that would be in the tank after traveling 50 miles?
- (A) 9 gallons
 - (B) 11 gallons
 - (C) 14 gallons
 - (D) 10 gallons
30. This double line graph shows average rainfall in two cities. What is the greatest difference between the two cities?
- (A) 4 feet
 - (B) 5 inches
 - (C) 3 inches
 - (D) 4 inches
31. Base your answer to the following question on the graph below, which shows two days of tidal data from a coastal location in the north-eastern United States. If the pattern shown continues, the most likely height and time for the first high tide on day 3 would be
- (A) 2.2 meters at 4 a.m.

- (B) 2.3 meters at 4 a.m.
(C) 2.2 meters at 5 a.m.
(D) 2.3 meters at 5 a.m.
32. Students filled a tub with hot water. They took turns reading the temperature of the water once every five minutes for 60 minutes. The students want to learn about the rate at which water cools. Which would be the best way to display the data?
(A) Bar graph
(B) Line graph
(C) Pie graph
(D) Histogram
33. A line graph shows the number of miles cycled each day for a week: 5, 7, 6, 8, 10, 9, 7. On which day was the greatest distance cycled?
(A) Day 1
(B) Day 4
(C) Day 5
(D) Day 6
34. The trend of students Science scores in Year 7
(A) Bar Chart
(B) Line Graph
35. What is the scale in this line graph?
(A) Jumps of 1
(B) Jumps of 2
(C) Jumps of 3
(D) Jumps of 4
36. Using the line graph below which presents the average number of customers per month of the three most popular shops in a city. By how many percent did Mels shop average number of customers increase from February to April?
(A) Between 70% to 80%
(B) Between 50% to 60%
(C) Between 60% to 70%
(D) Between 40% to 50%
37. The line plot shows the number of Quran verses students read in the Islamic class. What conclusion can you draw from the line plot?
(A) All students read at least 2 verses.
(B) Most students read 3 verses.
(C) Most students read 4 or 5 verses.
(D) No students read 5 verses.
38. In a line chart, what does the horizontal (x) axis typically represent?
(A) Values or quantities
(B) Time or categories
(C) Colors
(D) None of above
39. The graph shows the distance an object moved in 11 seconds. Which answer choice best describes the movement of the object between the times of 0 and 6 seconds on the graph?
(A) Moving at a constant speed
(B) Accelerating
(C) Moving toward the north
(D) Stopped
40. Which of the following graphs represents a proportional relationship?
(A) Graph A
(B) Graph B
(C) Graph C
(D) They are all proportional relationships.
41. Two private schools, School A and School B, kept track of their new enrollments during the 8-year period from 2000 to 2007, inclusive. Use the line chart given above to answer the question. During which school year did one school have 60% more new enrollments than the other?
(A) 2000
(B) 2001
(C) 2004
(D) 2006
42. Graph C is called what?
(A) Histogram
(B) Line graph
(C) Line plot
(D) Bar graph

43. Which of the following is a real-world application of line graphs in science?
- (A) Tracking the growth of a plant over time
 - (B) Comparing the population of different species
 - (C) Displaying the composition of a chemical compound
 - (D) Showing the parts of a cell
44. LINE Graph
- (A) Is a graph that uses symbols or pictures to represent data
 - (B) Is a graph that uses lines to represent data
 - (C) Is a graph that uses rectangular bars to represent data
 - (D) None of above
45. The graph shows a line of best fit for data collected on the distance bicyclists have remaining in relation to the amount of time they have been riding. What is the equation of the line of best fit?
- (A) $Y = -25x + 170$
 - (B) $Y = 25x + 170$
 - (C) $Y = -5/8x + 170$
 - (D) $Y = 5/8x + 170$
46. According to the graph, is the plant height increasing, decreasing, or staying the same?
- (A) Increasing
 - (B) Decreasing
 - (C) Staying the same
 - (D) None of above
47. What is the general trend of this line graph?
- (A) The more you mow, the more money you make
 - (B) The more you mow, the less money you make
 - (C) You make the same amount of money regardless of how long you mow
 - (D) None of above
48. Yvon started a new job. For every 5 hours she works, she earns \$90. Which other point will be on the graph?
- (A) (1, 15)
 - (B) (2, 45)
 - (C) (3, 60)
 - (D) (4, 72)
49. A line graph shows the growth of a plant over time. If the plant was 10cm tall at the beginning and grew to 20cm tall by the end, how much did the plant grow?
- (A) 5cm
 - (B) 10cm
 - (C) 15cm
 - (D) 20cm
50. A line on a graph passes through the origin and has a slope of 3. What is the unit rate?
- (A) 0
 - (B) 1
 - (C) 3
 - (D) 9TagsTEKS.MATH.8.4B
51. Used mostly for financial industry, visually illustrates fluctuations
- (A) Stock
 - (B) Surface
 - (C) Pie
 - (D) Column
52. A graph shows a line passing through the points (0,0) and (3,6). What is the unit rate?
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 6TagsTEKS.MATH.8.4B
53. Base your answers to questions on the graph and on your knowledge of Earth science. The graph shows the observed water levels, in feet (ft), for a tide gauge located at Montauk, New York, on the easternmost end of Long Island, from January 24, 2008 to noon on January 25, 2008. What was the height of the water above average low tide level at noon on January 24?
- (A) 1.2 ft
 - (B) 1.6 ft
 - (C) 2.2 ft
 - (D) 2.6 ft

54. Use the line graph above to answer the question: Which day of the week had the best hot dog sales?
- (A) Monday
 - (B) Tuesday
 - (C) Thursday
 - (D) Friday
55. The graph shows a line of best fit for data collected on the amount earned by waiters and waitresses last week in relation to the number of tables they served. What is the equation of the line of best fit?
- (A) $Y = 5/3x + 375$
 - (B) $Y = 1/3x + 625$
 - (C) $Y = x + 400$
 - (D) $Y = 30x + 375$
56. What is the first step in creating a line graph?
- (A) Collect and organize the data.
 - (B) Label the axes of the graph.
 - (C) Select a color scheme for the graph.
 - (D) Choose the type of graph to use.
57. Use the line graph to complete the question below: Did the car sales increase, decrease, or stay the same between Wednesday and Thursday?
- (A) Increase
 - (B) Decrease
 - (C) Stay the same
 - (D) None of above
58. Use the line graph to complete the question below: Which two days had the greatest increase?
- (A) Monday to Tuesday
 - (B) Tuesday to Wednesday
 - (C) Wednesday to Thursday
 - (D) Thursday to Friday
59. In a line graph, time is usually shown on the
- (A) X-axis
 - (B) Y-axis
60. How can you determine the trend or pattern in a line graph?
- (A) Analyze the direction, slope, and recurring patterns in the line graph.
 - (B) Look for the highest point on the line graph.
 - (C) Count the number of data points on the line graph.
 - (D) Examine the labels on the x-axis of the line graph.
61. The line graph tracks the number of visitors to a museum over four months: January (200), February (300), March (400), and April (500). What is the average number of visitors per month?
- (A) 250
 - (B) 450
 - (C) 350
 - (D) 400
62. In a school the periodical examinations are held every second month. In a session during April 2001-Mar 2002, a student of class 9 appeared for each of the periodical exams. The aggregate marks obtained by him in each periodical exam are represented in the line-graph given.2)What is the percentage of marks obtained by the student in the periodical exams of Aug 01 and Oct 01 taken together?
- (A) 73.25
 - (B) 75.5
 - (C) 77
 - (D) 78.75
63. The graph shows the speed of a car traveling east over a 12 second period. Based on the information in the graph, it can be concluded that in the first 6 seconds, the car is-
- (A) Changing its direction.
 - (B) Experiencing less and less friction.
 - (C) Accelerating at a constant rate.
 - (D) Climbing a steep incline
64. You have data on the motion of a runner over time. What kind of graph would you create with this data?

- (A) Circle graph
(B) Bar graph
(C) Line graph
(D) None of above
65. In a line graph, what does the slope of the line represent?
(A) The rate of change
(B) The total value
(C) The maximum value
(D) The minimum value
66. A line graph shows the temperature in degrees Fahrenheit over a week. If the points (1, 70), (2, 75), and (3, 80) are plotted, what can you infer about the temperature trend?
(A) The temperature trend is fluctuating.
(B) The temperature trend is constant.
(C) The temperature trend is increasing.
(D) The temperature trend is decreasing.
67. The following line graph gives the ratio of the amounts of imports by a Company to the amount of exports from that Company over the period 1195-2001. The questions below are based on this graph.2)If the imports of the Company in 1996 was Rs.272 crores, the exports in 1996 was:
(A) 370 crores
(B) 320 crores
(C) 275 crores
(D) 264 crores
68. Time series is the most important format of —
(A) Pictograms
(B) Line graph
(C) Histogram
(D) Pie diagram
69. A line graph displays the number of apples sold at a store over five days. If the highest point on the graph is at 120 on Wednesday, what does this indicate?
(A) 120 apples were sold in total over five days.
(B) An average of 120 apples were sold each day.
(C) 120 apples were sold on Wednesday.
(D) The store sold apples at \$120 each.
70. A line graph shows the number of books read by students over five months. In January, 10 books were read, in February 15, in March 20, in April 25, and in May 30. How many books were read in total over these five months?
(A) 80
(B) 90
(C) 100
(D) 70
71. Which of the following scenarios would produce a curved line on a distance-time graph?
(A) A car accelerating
(B) A person walking at a constant speed
(C) A train at rest
(D) A cyclist moving at a constant speed
72. What graph do you use to represent time or distance?
(A) Bar graph
(B) Data table
(C) Pie chart
(D) Line graph
73. With reference to hydrometer station, the graphical representation of the discharge as function of time is known as
(A) Hectograph.
(B) Hydro-graph.
(C) Load duration curve.
(D) Monograph
74. Choose the correct description for the graph
(A) A moderate improvement can be observed in June
(B) A dramatic decrease can be observed in July
(C) A rapid jump can be appreciated in July
(D) Sales went down all year.

75. How can you determine the trend in a line chart?
- (A) By looking at the colors
 - (B) By observing the slope of the line
 - (C) By counting the number of lines
 - (D) By reading the title
76. A graph that records each piece of data on a number line
- (A) Picture graph
 - (B) Line plot
 - (C) Key
 - (D) Horizontal bar graph
77. Which type of graph is most suitable for displaying the relationship between two continuous variables?
- (A) Bar graph
 - (B) Line graph
 - (C) Pie chart
 - (D) Histogram
78. Which of the following is a graph that uses a line to represent data?
- (A) A vertical graph
 - (B) A pie chart
 - (C) A line graph
 - (D) A bar chart
79. If a line graph shows a steady increase, what does that indicate?
- (A) It represents fluctuating values.
 - (B) It shows no change over time.
 - (C) It indicates positive growth or improvement.
 - (D) It indicates a decline in performance.
80. When visualizing data that can express changes in your data over time, which of the following is the most useful visualization type?
- (A) Bar Chart
 - (B) Pie Chart
 - (C) Histogram
 - (D) Line Chart
81. What is name of the chart pictured below? (1 mark)
- (A) Graph chart
 - (B) Pie chart
 - (C) Line chart
 - (D) Bar chart
82. In a line graph depicting temperature changes, what trend can be observed over the last week?
- (A) The temperature has been rising steadily over the last week.
 - (B) The temperature has been fluctuating wildly over the last week.
 - (C) The temperature has remained constant throughout the week.
 - (D) The temperature has been dropping consistently over the last week.
83. What would the graph of an arithmetic sequence look like?
- (A) If connected the dots would be linear
 - (B) If connected the dots would curve
84. If a line has a unit rate of 5, what is the slope of the line?
- (A) 0
 - (B) 1
 - (C) 5
 - (D) 10TagsTEKS.MATH.8.4B
85. The line graph shows the distance a runner covered each day for a week: 1 mile on Monday, 2 miles on Tuesday, and so on, increasing by 1 mile each day. How far did the runner go on Friday?
- (A) 3 miles
 - (B) 4 miles
 - (C) 5 miles
 - (D) 6 miles
86. The Jamison family kept a log of the distance they traveled during a trip, as represented by the graph below. During which interval was their average speed the greatest?
- (A) The first hour to the second hour
 - (B) The second hour to the fourth hour

- (C) The sixth hour to the eighth hour
(D) The eighth hour to the tenth hour
87. This double line graph for rainfall in two cities shows what pattern?
(A) Rain is steady all year.
(B) It is rainier in the summer months than in winter.
(C) It is the rainiest in winter.
(D) There is no rain. Both cities are dry year round.
88. The price of seafood over the course of 10 years.
(A) Bar chart
(B) Line graph
89. In this line plot, the most common amount of time for watching TV is ____
(A) 0 hours
(B) 1 hour
(C) 2 hours
(D) 3 hours
90. Use the line/dot plot. How many more pencils are $3\frac{1}{2}$ inches in length than $4\frac{1}{2}$ inches?
(A) 1
(B) 2
(C) 3
(D) 4
91. The line graph shows the sales of lemonade over a week. On Monday, 10 cups were sold, and sales increased by 5 cups each day. How many cups were sold on Saturday?
(A) 40
(B) 25
(C) 35
(D) 30
92. The graph below shows ocean water levels for a shoreline location on Long Island, New York. The graph also indicated the dates and times of high and low tides. Based on the data, the next high tide occurred at approximately
(A) 4 p.m. on July 13
(B) 10 p.m. on July 13
(C) 4 p.m. on July 14
(D) 10 p.m. on July 14
93. What does the line in graph B show the temperature doing over 10 days?
(A) Increasing
(B) Decreasing
(C) Stays the same
(D) Decreases then increases
(E) Increases then decreases
94. What is the best summary statement for this graph?
(A) Profits decreased in later years.
(B) Profits remained the same through the years.
(C) Profits increased through the years
(D) None of above
95. A line plot shows the number of pages read by students each day. If the line plot has an increasing number of X's from left to right, what does this indicate?
(A) Students read fewer pages as days go by.
(B) Students read more pages as days go by.
(C) The number of pages read is inconsistent.
(D) All students read the same number of pages every day.
96. Which Excel chart type is suitable for showing trends over a period of time?
(A) Bar Chart
(B) Pie Chart
(C) Line Chart
(D) Scatter Plot
97. A line plot shows the number of miles run by participants in a race. If the most common distance run, marked by the most X's, is 5 miles, what can we infer?
(A) Most participants ran less than 5 miles.
(B) 5 miles is the shortest distance run.
(C) Most participants ran exactly 5 miles.
(D) All participants ran 5 miles.

98. Study the following graph carefully & answer the questions given below it. Imports of 3 companies over the years (in Rs. Crores). In which of the following years, the imports made by company 'A' were exactly equal to the average import made by it over the given years?
- (A) 1995
(B) 1996
(C) 1997
(D) None of the above
99. Which of the following is the definition of LINE GRAPH?
- (A) Data presentation using pictures or symbols to show frequencies
(B) It shows data that have been collected over a time period.
(C) It represents data in form of bars of equal width.
(D) A type of graph in which a circle is divided into sectors that each represent a proportion of the whole.
100. What are the key components of a line graph?
- (A) Labels, legend, pie chart
(B) X-axis, y-axis, bar connecting data points
(C) Title, subtitle, grid lines
(D) X-axis, y-axis, data points, line connecting data points
101. This list shows the ages of 13 children at a playground. 5, 4, 7, 6, 5, 3, 2, 5, 7, 8, 4, 6, 6 Which line plot shows the number of students at each age?
- (A)
(B)
(C)
(D)
102. Read the given line graph carefully and answer the questions. The Line graph shows the percentage of AC sold by six shopkeepers.1) AC's sold by shopkeeper T and V together is how much percent more than AC's sold by shopkeeper R and S together?
- (A) 36%
(B) 40%
(C) 38%
(D) 42%
103. What pattern is evident on this line graph?
- (A) Ability to do situps had no change as the days continued
(B) Ability to do situps decreased as the days continued
(C) Ability to do situps increased as the days continued
(D) Ability to do situps does not pertain to the graph
104. On a line plot, if the numbers 2, 4, and 6 have an equal number of X's above them, what can we infer?
- (A) The numbers 2, 4, and 6 are equally unpopular.
(B) The numbers 2, 4, and 6 are equally common.
(C) No one chose numbers 2, 4, or 6.
(D) The numbers 2, 4, and 6 were chosen at random.
105. Look at the graph. From Tuesday to Wednesday —
- (A) A sharp increase occurs
(B) A gradual increase occurs
(C) A sharp decrease occurs
(D) The data stays constant
106. If a time-distance graph shows a line that returns to the starting point, what does this indicate about the object's motion?
- (A) The object has stopped moving
(B) The object has returned to its starting position
(C) The object is moving at a constant speed
(D) The object is accelerating
107. The graph shows the tidal range (the difference between the highest tide and the lowest tide) recorded in Minas Basin, Nova Scotia, during November 2007. The phase of the Moon on selected days is shown above

the graph. The dates that the Moon was farthest from Earth (apogee) and closest to Earth (perigee) are indicated under the graph. The tidal range on November 8 was approximately

- (A) 11 m
- (B) 2 m
- (C) 13 m
- (D) 15 m

108. Which data viz example in the Edpuzzle used an example of broadband internet access and availability in Europe over the course of several years?

- (A) Bar Chart
- (B) Pie Chart
- (C) Histogram
- (D) Line Chart

109. What is the primary purpose of using a line graph in scientific experiments?

- (A) To show the distribution of data
- (B) To compare different categories
- (C) To illustrate trends over time
- (D) To display parts of a whole

110. Read the following line graph carefully and answer the given questions below: Following line graph shows the number of red and blue colored candies (in lakhs) produced in 6 different years. Candies produced of red color in 2018 are what percentage less/more than candies produced of red color in 2017?

- (A) 30
- (B) 20
- (C) 60
- (D) 50

111. A line graph shows the number of visitors to a park over several months. If the line dips in February, what might this indicate?

- (A) The park is closed in February.
- (B) Fewer people visited the park in February.
- (C) More people visited the park in February.
- (D) The data for February is missing.

112. A graph of tidal sea-level changes at a coastal city is shown in the diagram. The number of hours from one high tide to the next high tide is approximately

- (A) 4 h
- (B) 8 h
- (C) 12 h
- (D) 24 h

113. A car travels 60 km in 2 hours, then stops for 1 hour, and finally travels 30 km in 1 hour. Which distance-time graph best represents this journey?

- (A) A graph with two straight lines and a horizontal line in between
- (B) A graph with a single straight line
- (C) A graph with a curved line
- (D) A graph with three straight lines

114. The graph shows the relationship between time and distance for a track runner. What is the slope of the line on the graph?

- (A) $\frac{3}{2}$
- (B) 3
- (C) 2
- (D) $\frac{1}{3}$

1.4.4 Pie Chart Data Interpretation

1. A curved axis is useful for:

- (A) Time series
- (B) Categorical values
- (C) Directional or radial relationships
- (D) Bar charts

2. What is the maximum number of categories

that can be effectively represented in a pie chart?

- (A) 5
- (B) 10
- (C) 15
- (D) It depends on the clarity and simplicity of the chart

3. If the pie chart represents 48 fans in total, how many fans support Scotland?
(A) 6 fans
(B) 12 fans
(C) 8 fans
(D) 15 fans
4. If the pie chart shows section M as 60%, what percentage of the pie chart is not represented by M?
(A) 40%
(B) 30%
(C) 50%
(D) 70%
5. If the purple sector of the pie chart is 90 degrees, what percentage does it represent?
(A) 75%
(B) 50%
(C) 25%
(D) 10%
6. The monthly budget of Tibay family is Php 37 200. Shown below is a pie chart presenting the allocation of Tibay family's monthly budget for their domestic expenditures. How much of the family's annual budget is not saved?
(A) Php 32 500
(B) Php 32 880
(C) Php 33 480
(D) Php 33 520
7. A diver wants to make a pie chart of his trip. Which one of these is a correct method for finding F?
(A) $360 - 180 + 45$
(B) $\frac{12}{20} \times 360$
(C) $360 - 180 - 45$
(D) $\frac{360}{32}$
8. The pie chart shows how Mr Yeo spends his monthly salary. Given that Mr Yeo saves \$840 a month, find the amount of money he spends on RENT.
(A) \$240
(B) \$1000
(C) \$360
(D) \$840
9. Favorite ice creams are shown in the chart. What size of angle represents Chocolate?
(A) 144
(B) 96
(C) 108
(D) 104
10. What does a pie chart show?
(A) How a whole is divided up
(B) The total number of things
(C) The percentage values of different parts
(D) All of the above
11. How can you compare two different pie charts effectively?
(A) Ensure same scale, consistent colors, clear labels, title, and key.
(B) Use different scales for each chart
(C) Omit labels and title
(D) Randomize colors for each chart
12. How would you calculate the angle corresponding to Pinocchio?
(A) $15/100 \times 360$
(B) $15/360 \times 100$
(C) $15/100$
(D) $360/15$
13. Cindy went to pick up a few things at the grocery store for her mom. She spent \$10. The pie graph shows what Cindy spent on each item. Which was the least expensive food item?
(A) Chicken
(B) Fruit
(C) Milk
(D) Potatoes
(E) Cookies
14. A pie chart represents the types of books read by a class. If 30% of the chart is dedicated to

- fiction books, what does this percentage signify?
- (A) 30% of the books are non-fiction.
 - (B) 30% of the students dislike fiction.
 - (C) 30% of the books read are fiction.
 - (D) Each student reads 30 fiction books.
15. What is the total percent of a pie or circle graph?
- (A) 10%
 - (B) 50%
 - (C) 100%
 - (D) 1000%
16. What percentage of the pie chart does segment A represent?
- (A) 25%
 - (B) 10%
 - (C) 50%
 - (D) 75%
17. A pie chart represents the distribution of time spent on various activities in a week. If the central angle for sports is 60°
- (A) $\frac{1}{6}$
 - (B) $\frac{1}{4}$
 - (C) $\frac{1}{3}$
 - (D) $\frac{1}{2}$
18. How can you calculate the percentage represented by each slice in a pie chart?
- (A) Add the size of each slice to get the total percentage
 - (B) Multiply the size of each slice by 10 to get the percentage
 - (C) Divide the size of each slice by the total size of the pie chart, then multiply by 100 to get the percentage.
 - (D) Subtract the size of each slice from 100 to get the percentage
19. Describe a scenario where a pie chart would be the most effective way to represent data.
- (A) For representing data that requires detailed numerical values
 - (B) In situations where the data points are not related to each other
 - (C) In scenarios where illustrating the proportion of various components relative to the whole is essential.
 - (D) When the data is continuous and needs to be compared over time
20. The circle graphs provided show how Doug and Fred spend their time after school. What is the difference between the percent of time Doug spends playing sports and the percent of time Fred spends playing sports?
- (A) 14%
 - (B) 10%
 - (C) 4%
 - (D) 1%
21. The pie chart shows the favorite sports of 800 people. What percentage of the people like to play badminton?
- (A) 28%
 - (B) 25%
 - (C) 4%
 - (D) None of above
22. There were a group of people at a food court. Each person ordered only one type of food. The pie chart represents the food they ordered. What percentages of the people ordered satay?
- (A) 15%
 - (B) 20%
 - (C) 75%
 - (D) None of above
23. If a pie chart shows that 25% of students prefer soccer, 50% prefer basketball, and 25% prefer tennis, how many students prefer basketball if there are 40 students in total?
- (A) 15 students
 - (B) 25 students
 - (C) 30 students
 - (D) 20 students

24. Ms. Rubin took a poll of 80 students to find out how they got to school. The results are shown in the circle graph below. How many more students get to school on a bus than in a car?
- (A) 24 students
(B) 10 students
(C) 8 students
(D) 32 students
25. The pie chart shows the types of animals 60 pupils kept as pets. How many pupils kept TERRAPINS?
- (A) 60
(B) 12
(C) 10
(D) 18
26. How can you identify outliers or anomalies in a pie chart?
- (A) Look for patterns in the colors used
(B) Check the legend for inconsistencies
(C) Look for slices that deviate noticeably in size from the others.
(D) Count the number of slices in the chart
27. Which circle graph best represents the same set of data as the bar graph?
- (A)
(B)
(C)
(D)
28. According to the pie chart, which fruit is imported the most?
- (A) Apples
(B) Oranges
(C) Bananas
(D) Kiwi
29. A pie chart shows the distribution of sports played by students. If 25% play basketball and there are 20 students, how many play basketball?
- (A) 5
(B) 8
(C) 15
(D) 10
30. Observe the given image and choose the correct answer.
- (A) Scatter Chart
(B) Pie Chart
(C) Radar Chart
(D) None of above
31. Create a pie chart representing the following data: Category A-30%, Category B-20%, Category C-50%.
- (A) Category A: 10%, Category B: 40%, Category C: 50%
(B) { "Category A": 108, "Category B": 72, "Category C": 180 }
(C) Category A: 40%, Category B: 30%, Category C: 30%
(D) Category A: 25%, Category B: 25%, Category C: 50%
32. Mr Li sold 40 kg of vegetable. the pie chart represent the amount of each type of vegetables sold. how many kilograms of bean sprouts did he sell?
- (A) 20 kg
(B) 25 kg
(C) 50 kg
(D) 100 kg
33. A store has a pie chart showing the percentage of sales from different products. If 40% of sales come from toys, 30% from books, and 30% from games, how much more does the store earn from toys than from books if total sales are \$1,000?
- (A) \$200
(B) \$50
(C) \$100
(D) \$150
34. How can you use a pie chart to identify trends or patterns in data?
- (A) By analyzing the legend of the pie chart

- (B) By counting the number of colors used in the chart
- (C) By analyzing the size of each slice relative to the whole pie chart.
- (D) By measuring the circumference of the pie chart
35. How many percent does the blue section represent? Note: The red section is $\frac{1}{4}$ of the pie chart.
- (A) 75 percent
- (B) $\frac{3}{4}$ percent
- (C) 270 percent
- (D) 25 percent
36. Which chart type would be most effective for displaying the percentage share of each product in total sales?
- (A) Area Chart
- (B) Column Chart
- (C) Pie Chart
- (D) Line Chart
37. According to the pie graph, what COUNTRY receives 28% of imports from the US?
- (A) All Others
- (B) Japan
- (C) Mexico
- (D) Taiwan
38. What is another name for circular graph?
- (A) Bar graph
- (B) Line graph
- (C) Pie chart
- (D) Histogram
39. Which is not a type of circle graph?
- (A) Cherry pie
- (B) Donut chart
- (C) Exploded donut chart
- (D) 3D circle graph
40. What's the first step in constructing a pie chart?
- (A) Draw a sector
- (B) Draw a line of radius
- (C) Draw half of a circle
- (D) Draw a circle
41. If a pie chart has 5 categories and each category represents 20%, what is the total percentage?
- (A) 100%
- (B) 120%
- (C) 80%
- (D) 50%
42. The pie chart shows the number of Secondary students joining the co-curricular activities. 28% of the students join Soccer. If there are 300 Secondary students, how many students join Soccer?
- (A) 126 students
- (B) 92 students
- (C) 84 students
- (D) 72 students
43. Choose the best option.
- (A) The blue section represents more than 50%.
- (B) The green section represents about 75%.
- (C) The purple section represents more than $\frac{1}{4}$.
- (D) The red section represents about 20%.
44. The comparative pie charts show the membership of Seaton Squash club in 1980 and 1990. What happened to the total number of Senior Male members in that time?
- (A) Increased
- (B) Decreased
- (C) Stayed the same
- (D) None of above
45. Mrs. Leffler's class grades were graphed as a pie chart (circle graph). Based on this graph, The largest percentage of students received what grade?
- (A) A
- (B) B
- (C) C
- (D) D

46. The circle graph shows the results of a poll that asked students about their favorite after school activity/elective. Which was the least popular answer based on the results in the circle graph?
- (A) Theater
(B) Band
(C) Choir
(D) Sports
47. The pie chart shows the type of books in the library. There are 140 Malay books. What is the ratio of the number of Malay books to the number of English books?
- (A) 14: 25
(B) 7: 50
(C) 7: 25
(D) 3: 7
48. Which summer activity is the most popular according to the pie chart, and what percentage of people prefer it?
- (A) 8%
(B) 13%
(C) 27%
(D) 33%
49. If a pie chart represents the distribution of 3 favorite colors and shows that 20% like blue, and 50% like green, what percentage of people like red?
- (A) 30%
(B) 20%
(C) 40%
(D) 50%
50. What is the key element of a Pie Chart in Excel?
- (A) Vertical bars of varying heights
(B) Data points connected by lines
(C) Circular graph divided into slices
(D) Horizontal bars
51. In a class there are 10 boys and 20 girls. A pie chart representing the boys' favourite flavours of ice cream has a radius of 3cm. What should the radius of the girls' pie chart be? Give your answer correct to 1.d.p
- (A) 5cm
(B) 5.6cm
(C) 4.2cm
(D) 6cm
52. The pie chart shows the percent of students with different footwear. Estimate the percent of students who wear sneakers.
- (A) 22%
(B) 11%
(C) 32%
(D) 30%
53. The contents of a box of mixed sweets are presented in this pie chart. What percentage are fruit chews?
- (A) 50
(B) 25
(C) 75
(D) 35
54. If a pie chart has 360 degrees, what does each degree represent in terms of percentage?
- (A) 0.5%
(B) 0.25%
(C) 0.2778%
(D) 0.355%
55. This graphic organizer is a type of circular graph, which is divided into slices to illustrate a numerical proportion
- (A) Graph
(B) Line Graph
(C) Table
(D) Pie Chart
56. According to this circle graph, what is the least popular flavor of Jolly Rancher?
- (A) Blue Raspberry
(B) Watermelon
(C) Grape
(D) Apple

57. Knowing that the total of a certain surveyed population is 25. The central angle of a value whose frequency 5 is:
- (A) 20°
 - (B) 72°
 - (C) 90°
 - (D) 105°
58. The following pie chart shows the sources of funds to be collected by the NHAI for its Phase II projects. Study the pie chart and answer the questions that follow. 2) If NHAI could receive a total of Rs. 9695 crores as External Assistance, by what percent (approx) should it increase the Market Borrowings to arrange for the shortage of funds?
- (A) 4.5
 - (B) 7.5
 - (C) 6
 - (D) 8
59. What is the measure of the central angle in the "running" section?
- (A) 108°
 - (B) 30°
 - (C) 90°
 - (D) 36°
60. When should you avoid using a pie chart?
- (A) When comparing categorical data
 - (B) When visualizing proportions of a whole
 - (C) When there are too many categories
 - (D) When the dataset is numerical
61. What is the angle of a sector that represents 10% of the total data in a pie chart?
- (A) 36 degrees
 - (B) 60 degrees
 - (C) 30 degrees
 - (D) 45 degrees
62. Example: What percent of 8th graders like hip hop, country, and pop music?
- (A) Bar graph
 - (B) Line graph
 - (C) Pie chart
 - (D) None of above
63. The pie chart shows the favourite game of all the students in a school. What fraction of students in the school said carrom is their favourite game?
- (A) Half
 - (B) Three fourth
 - (C) One fourth
 - (D) All
64. A pie chart illustrates the favorite subjects of students in a class. 20% like math, 50% like science, and 30% like art. If there are 20 students, how many like science?
- (A) 15
 - (B) 8
 - (C) 10
 - (D) 5
65. How can you explode a segment in a pie chart?
- (A) Use the expand attribute
 - (B) Set a number for the explode parameter
 - (C) Adjust the value of the size parameter
 - (D) Specify the segment index number
66. The pie chart shows how a group of adults travel to work. What fraction of the adults take the train to work? Hint: Total is 1420.
- (A) $1/3$
 - (B) $10/23$
 - (C) $10/27$
 - (D) $25/71$
67. When analyzing a pie chart showing the distribution of energy sources, what does a larger slice indicate?
- (A) A smaller percentage of total energy
 - (B) A larger percentage of total energy
 - (C) The most expensive energy source
 - (D) The least used energy source
68. How can we draw pie charts?

- (A) Find the fraction of each item listed. Draw accordingly.
(B) Draw a circle and make it into equal parts
(C) Draw a pie and divide it into different parts and add numbers
(D) It's none of them!
69. What type of chart is best for displaying parts of a whole?
(A) Line chart
(B) Bar chart
(C) Pie chart
(D) Histogram
70. A survey was taken on the salaries of lawyers. The results were recorded in the graph. Which circle graph represents the same data?
(A)
(B)
(C)
(D)
71. During the baseball season, the total number of home runs each player made was recorded. Which histogram represents the same data shown in the circle graph?
(A)
(B)
(C)
(D)
72. Which type of chart is used to represent the proportion or percentage of different categories as a whole?
(A) Bar chart
(B) Line chart
(C) Pie chart
(D) Area chart
73. Use the pie chart to complete the table.
(A) E-16, S-60%, S-8, W-6, F-6
(B) E-14, S-60%, S-7, W-6, F-6
(C) E-16, S-60%, S-8, W-4, F-4
(D) E-16, S-45%, S-8, W-6, F-6
74. The pie chart shows the percentage of each type of vehicles in a car park. What percentage of the vehicles are lorries?
(A) 15%
(B) 30%
(C) 85%
(D) None of above
75. The circle graph shows the percentages of how people get to work. Find the percent of people who take the train to work.
(A) 110%
(B) 90%
(C) 10%
(D) 30%
76. The pie chart provided below gives the distribution of land under various food crops. Study the pie-chart carefully and answer the questions. 1) If the total area under jowar was 1.5 million acres, then what was the area (in million acres) under rice?
(A) 6
(B) 7.5
(C) 9
(D) 4.5
77. The parts of the whole pie chart are represented by pieces of the circle. What are they often called?
(A) Puzzles
(B) Chips
(C) Slices
(D) None of above
78. Mr. Jones took a survey on how many text messages his students sent and received each day and recorded the results in the circle graph. Which graph represents the same data?
(A)
(B)
(C)
(D)

79. According to this pie chart, what percent of people ate ice cream yesterday?
(A) 14%
(B) 29%
(C) 43%
(D) None of above
80. A man's monthly salary is Rs 2400 and his monthly expenses on travel are Rs 250. The central angle of the sector representing travel expenses in the pie chart would be
(A) 30°
(B) 37.5°
(C) 45°
(D) 60°
81. When one of the portions on a pie chart is 144 degrees, what is the equivalent in percentage?
(A) 44%
(B) 40%
(C) 144%
(D) None of the answers listed
82. What does the central angle of each wedge in a pie chart represent?
(A) Mean of the dataset
(B) Frequency of data within each category
(C) Proportion of the whole corresponding to a category
(D) Variance of the dataset
83. What angle would you use to represent 40 red cars out of 90 cars in total on a pie chart?
(A) 40 degrees
(B) 160 degrees
(C) 4 degrees
(D) 90 degrees
84. Name the instrument that is used to measure a pie chart.
(A) Ruler
(B) Compass
(C) Protractor
(D) Divider
85. The Fiscal Expenditures pie chart above was created for the city council to indicate the percentage of expenditures of education, parks, and road maintenance to the total budget. Which feature will list the three expenditures?
(A) Axis title
(B) Data series
(C) Gridlines
(D) Legend
86. Riya has created a chart to show the sales of fruits (Apple, Mango, Banana). She wants to highlight which fruit is sold the most compared to the others. Which chart type will BEST help her?
(A) Line Chart
(B) Pie Chart
(C) Column Chart
(D) XY Scatter Chart
87. A pie chart shows how students get to school. If 25% of the chart is dedicated to walking, what does this percentage represent?
(A) 25 students walk to school.
(B) 25% of the time, students walk to school.
(C) 25% of the students walk to school.
(D) Students walk 25 miles to school.
88. In pie charts, 50% is equivalent to ___ degrees
(A) 50
(B) None of the answers listed
(C) 180
(D) 100
89. How do you determine the percentage of section L if it covers 50 degrees in a 360-degree pie chart?
(A) 10%
(B) 25%
(C) 13.89%
(D) 20%
90. In a pie chart showing the distribution of expenses, if rent occupies 50% of the chart, what percentage does groceries occupy if it is the second highest expense?

- (A) 10%
(B) 40%
(C) 25%
(D) 60%
91. The pie chart shows the number of souvenirs a small shop sold in 4 months. How many souvenirs were sold in those 4 months altogether?
(A) 500 souvenirs
(B) 1000 souvenirs
(C) 1500 souvenirs
(D) 2000 souvenirs
92. What is the purpose of using a legend in a pie chart?
(A) To confuse the viewer with extra information
(B) To add unnecessary clutter to the chart
(C) To provide a key for the different categories represented by the slices of the pie chart.
(D) To make the chart more visually appealing
93. In a pie chart showing favorite sports, if basketball is 25% and soccer is 30%, what percentage do baseball and football represent together?
(A) 55%
(B) 45%
(C) 35%
(D) 40%
94. Which section represents the smallest part of the pie chart if section I is 5%?
(A) Section II is 10%
(B) Section III is 5%
(C) Section IV is 7%
(D) Any section less than 5%
95. These pie charts show how people travel to work in 2 towns. In which town do more people travel to work by bike?
(A) Town A
(B) Town B
(C) Both the same
(D) Impossible to say
96. If a pie chart shows that 25% of the data is represented by a certain color, what does this percentage mean?
(A) 25% of the data is not of the specified color.
(B) 25% of the data is of the specified color.
(C) The color is irrelevant to the data.
(D) The color represents 75% of the data.
97. When using a protractor to read the relative proportions on a pie chart, it does not matter how the protractor is placed on the pie chart so long as you get a reading.
(A) True
(B) False
(C) It depends on the type of relative activities measured on the pie graph
(D) It depends on the level of experience of the user
98. Which of the following is a drawback of using pie charts?
(A) They cannot represent proportions accurately.
(B) They are not suitable for categorical data.
(C) They may not accurately convey small differences in proportions.
(D) They are only effective for numerical data.
99. According to the pie chart, how much of a house's water usage is for showers?
(A) 26.7%
(B) 13.7%
(C) 21.7%
(D) 16.8%
100. Which type of chart is divided into portions representing data percentages?
(A) Column chart
(B) Bar chart
(C) Line chart
(D) Pie chart

101. If a pie chart has 8 categories, each representing an equal percentage, what is the angle of each category?
- (A) 90 degrees
(B) 60 degrees
(C) 30 degrees
(D) 45 degrees
102. In comparative pie charts, what is proportional to the total frequency?
- (A) Radius
(B) Diameter
(C) Area
(D) Circumference
103. The pie chart shows the favorite sports of 800 people. What fraction of the people like to play volleyball?
- (A) $\frac{4}{25}$
(B) $\frac{5}{25}$
(C) $\frac{20}{25}$
(D) None of above
104. Which of the following best describes a pie chart?
- (A) A chart that uses bars to show data
(B) A chart that uses lines to connect data points
(C) A circular chart divided into sectors
(D) A chart that uses pictures to represent data
105. The pie chart shows the types of fruits sold by a supermarket in a week. What fraction of the fruits sold were oranges?
- (A) $\frac{11}{50}$
(B) $\frac{33}{70}$
(C) $\frac{33}{100}$
(D) None of above
106. The pie chart represents the number of birds in a park. There are 1200 birds in total. If there are 216 owls in the park, what percentage are owls?
- (A) 20%
(B) 18%
(C) 15%
(D) 10%
107. The pie chart shows the favorite fruit of some people. Based on the pie chart, which statement is incorrect?
- (A) 40% of the people like banana
(B) 73% of the people like orange and banana altogether
(C) 87% of the people like apple and banana altogether
(D) None of above
108. Which parameter is used to display percentages on each segment?
- (A) Label ___ pct
(B) Percent
(C) Autopct
(D) Show ___ pct
109. In a pie chart representing pet ownership among a group of people, if 25% of the chart is dedicated to dogs, what does this percentage represent?
- (A) The number of people who own dogs is 25% of the total number of pets owned.
(B) The number of people who own dogs is 25% of the total number of people surveyed.
(C) The number of dogs is 25% higher than the number of any other pet.
(D) The number of dogs is equal to the number of all other pets combined.
110. Using the pie chart, what percentage of the total does the largest segment represent?
- (A) Y%
(B) X%
(C) Z%
(D) A%
111. Cindy went to pick up a few things at the grocery store for her mom. She spent \$10. The pie graph shows what Cindy spent on each item. Which cost more—cookies or fruit?
- (A) Fruit
(B) Cookies

112. What fraction does the red section represent? Note: The blue section is 75% of the pie chart.
- (A) $\frac{1}{25}$
(B) $\frac{1}{2}$
(C) $\frac{3}{4}$
(D) $\frac{1}{4}$
113. If a pie chart shows that 40% of students like math, 30% like science, and 30% like art, how many students were surveyed if there are 120 students in total?
- (A) 110
(B) 100
(C) 130
(D) 120
114. The PE department surveyed 160 students to see which sports they preferred. The circle graph shows the results of the survey. About how many students chose soccer as their favorite sport?
- (A) 29
(B) 46
(C) 6
(D) 78
115. People went to a ice hockey match. The pie chart shows the colours of their shirts. How many people wore black?
- (A) 45
(B) $\frac{1}{8}$
(C) 1
(D) 4
116. One Sunday, 2800 people went to stadium to watch a soccer match. the pie chart below shows the percentage of men, women and children who attended the match. how many men attended the soccer match?
- (A) 900
(B) 980
(C) 1400
(D) 1800
117. The worksheet entries that determine the size of the slices in a pie chart are called the —
- (A) Data series.
(B) Data collection.
(C) Chart data.
(D) All the above.
118. A pie chart shows that 25% of a pizza is pepperoni. If the pizza has 8 slices, how many slices are pepperoni?
- (A) 3 slices
(B) 1 slice
(C) 4 slices
(D) 2 slices
119. If the total value represented by the pie chart is 200, what is the value of segment E if it represents 30%?
- (A) 40
(B) 80
(C) 60
(D) 100
120. The given pie charts show expenditure of a family on various items in July and August. What is the ratio of expenditure on education for the month of July to that of August?
- (A) 1: 1
(B) 3: 2
(C) 4: 1
(D) 5: 6
121. What does it mean if a wedge in a pie chart is larger than others?
- (A) It represents the median of the dataset.
(B) It represents the mean of the dataset.
(C) It has a higher frequency within its category.
(D) It has a lower frequency within its category.
122. Which type of chart is this?
- (A) Cookie Chart
(B) Pie Chart
(C) Donut Chart
(D) None of above

123. What percent of the circle is not shaded?
(A) 25%
(B) 60%
(C) 75%
(D) 80%
124. The pie chart shows the hair colour of a Year 9 class. A student is selected at random. What is the probability that they have brown hair?
(A) 180%
(B) 50%
(C) 25%
(D) 90%
125. What angle measure does a whole circle graph represent?
(A) 360 degrees
(B) 90 degrees
(C) 50 degrees
(D) 100 degrees
126. A pie chart is used to do what?
(A) Show trends over time
(B) Represent only one series of data
(C) Show the correlation of two or more sets of data
(D) Show how many pieces you can eat
127. If one pie chart shows 40% of the data as red and another pie chart shows 20% of the data as red, how can you compare the two data sets?
(A) The two data sets have the same proportion of red.
(B) The first data set has more data than the second data set.
(C) The second data set has a higher proportion of red compared to the first data set.
(D) The first data set has a higher proportion of red compared to the second data set.
128. How is the data displayed in this circle graph?
(A) Fraction
(B) Decimal
(C) Percent
(D) None of above
129. Which of the following sentences uses the term 'pie chart' correctly?
(A) The pie chart was delicious and filled with apples.
(B) The scientist used a pie chart to display the data.
(C) She wore a pie chart to the party.
(D) He played a pie chart on his guitar.
130. If a pie chart represents data on favorite fruits and shows that 25% of people like apples, how many people like apples if there are 80 people in total?
(A) 30
(B) 10
(C) 15
(D) 20
131. What percentage does a half circle of a Pie Chart represent?
(A) 360%
(B) 90%
(C) 50%
(D) 100%
132. What information does each pie chart provide?
(A) Reasons why people choose to either cycle or drive to work
(B) Reasons why people choose to either ride a horse or drive to work
(C) Key reasons why people choose to either take a bus or cycle to work
(D) None of above
133. A pie chart shows that 30% of the students prefer math, 50% prefer science, and 20% prefer art. If there are 50 students, how many prefer science?
(A) 40
(B) 35
(C) 25
(D) 15

134. If section B is 25% of the pie chart, what fraction of the pie chart does it represent?
- (A) $\frac{2}{5}$
(B) $\frac{1}{4}$
(C) $\frac{1}{2}$
(D) $\frac{3}{8}$
135. In a pie chart showing favorite colors, if red is 20% and blue is 40%, what percentage do green and yellow represent together?
- (A) 40%
(B) 25%
(C) 50%
(D) 30%
136. The pie chart shows the favourite game of all the students in a school. What is the total number of students in the school?
- (A) 320
(B) 360
(C) 270
(D) 180
137. What is the fraction of RED slices?
- (A) $\frac{3}{10}$
(B) $\frac{4}{8}$
(C) $\frac{3}{8}$
(D) 3
138. In a pie chart representing the distribution of study time for students, if 25% study for 2 hours, 50% study for 3 hours, and 25% study for 4 hours, how many students were surveyed if there are 200 students in total?
- (A) 250
(B) 175
(C) 200
(D) 150
139. What percentage is shown in the yellow section?
- (A) 15%
(B) 25%
(C) 30%
(D) 20%
140. The following pie chart shows the number of pupils who took part in various ECA. what is the difference between the number of pupils who took up IT club and library?
- (A) 180 pupils
(B) 30 pupils
(C) 25 pupils
(D) 20 pupils
141. What percentage does a whole pie chart represent?
- (A) 360%
(B) 90%
(C) 50%
(D) 100%
142. There were a group of people at a food court. Each person ordered only one type of food. The pie chart represents the food they ordered. What fraction of the people ordered meatball?
- (A) $\frac{3}{53}$
(B) $\frac{1}{10}$
(C) $\frac{1}{5}$
(D) None of above
143. If the pie chart is divided into 4 equal sections, what percentage does each section represent?
- (A) 10%
(B) 50%
(C) 25%
(D) 75%
144. The favourite activities of 72 children can be seen in the given pie chart. How many children like listening to music?
- (A) 4
(B) 9
(C) 12
(D) 8

145. Sara spent \$15 each week for 10 weeks. The circle graph represents how Sara spent her money on five different types of items. Based on this graph, which appears to be the closest to the amount of money Sara spent on music and snacks?
- (A) \$40.00
 - (B) \$60.00
 - (C) \$70.00
 - (D) \$80.00
146. A pie chart shows the distribution of pets owned by families in a neighborhood. 25% have dogs, 50% have cats, and 25% have birds. If there are 40 families, how many families have dogs?
- (A) 20 families
 - (B) 10 families
 - (C) 15 families
 - (D) 5 families
147. How many degrees does the blue section represent? Note: The red section is $\frac{1}{4}$ of the pie chart.
- (A) 75 degrees
 - (B) $\frac{3}{4}$ degrees
 - (C) 270 degrees
 - (D) 90 degrees
148. An enhanced version of the pie chart.
- (A) Pie chart
 - (B) Xy scatter chart
 - (C) Column chart
 - (D) Exploded pie chart
149. The pie chart shows how pupils of River of Praise School travel to school. Given that 378 pupils travel to school by e-bike, how many pupils are there in the school?
- (A) 14
 - (B) 100
 - (C) 1400
 - (D) 27
150. Based on the following pie chart, what does this household spend the LEAST amount of money on each month?
- (A) Housing
 - (B) Gas
 - (C) Insurance
 - (D) Entertainment
151. According to the following circle graph, what is the least favorite beverage?
- (A) Coffee
 - (B) Cola
 - (C) Water
 - (D) Tea
152. What do you call this chart?
- (A) Pictograph
 - (B) Pie chart
 - (C) Bar graph
 - (D) Line graph
153. What is the key feature of a pie chart that makes it easy to compare different categories?
- (A) Thickness of each slice indicates the importance of the category
 - (B) Distance between slices shows the relationship between categories
 - (C) Size of each slice represents the proportion or percentage of each category relative to the whole
 - (D) Color of each slice represents the category
154. What percentage of the pie chart represents section A if it covers 30% of the total?
- (A) 15%
 - (B) 25%
 - (C) 30%
 - (D) 50%
155. The total value of pie is always equal to
- (A) 50%
 - (B) 25%
 - (C) 75%
 - (D) 100%

- 156.** PIE CHART is analyzed by using comparison between 2 segments
(A) True
(B) False
- 157.** This pie chart shows what percentage of students study each subject in Year 10. Which is the least popular subject?
(A) Science
(B) Maths
(C) Computers
(D) History
- 158.** Compare two pie charts and determine which category has a larger percentage in each chart.
(A) The category with the smallest percentage is the most important.
(B) The output will depend on the specific data and categories in the pie charts.
(C) The colors of the pie charts determine the percentage.
(D) The category with the largest percentage is always in the same position.
- 159.** What kind of graph is it?
(A) Bar chart
(B) Pie chart
(C) Tally
(D) Line graph
- 160.** The circle graph shows the percentage of names. What is the percentage of people named Tony?
(A) 60%
(B) 25%
(C) 50%
(D) 75%
- 161.** How can you compare different categories in a pie chart?
(A) By analyzing the size of each slice relative to the whole pie
(B) By comparing the thickness of each slice
(C) By counting the number of colors used
(D) By analyzing the labels on the chart
- 162.** A — is a special chart that uses "pie slices" to show relative sizes of data.
(A) Bar graph
(B) Pie graph
(C) Information mapping
(D) Table
- 163.** Which of these types of charts compare multiple series of data in a percentage format?
(A) Scatter plot
(B) Doughnut
(C) Bubble
(D) Stock
- 164.** What would the best title for this pie chart be?
(A) Fruits
(B) Favorite Fruits
(C) Peaches
(D) Don't buy bananas.
- 165.** What is the combined percentage of people who prefer the activities represented by the blue and orange sections of the pie chart?
(A) 21%
(B) 25%
(C) 30%
(D) 35%
- 166.** If a pie chart has 6 sectors and one sector represents 16.67%, what is the angle of each sector?
(A) 30 degrees
(B) 45 degrees
(C) 75 degrees
(D) 60 degrees
- 167.** The pie chart shows the percentage of boys in a class. What percentage of the class are girls?
(A) 42%
(B) 68%
(C) 58%
(D) 38%

168. Based on a recent survey of 500 students, the circle graph below shows how students communicate with friends. How many more students chose social media apps than phone calls to communicate with friends?
- (A) 36 students
(B) 12 students
(C) 180 students
(D) 300 students
169. Which sector of the pie chart is the smallest?
- (A) The sector closest to the center is the smallest.
(B) The sector with the brightest color is the smallest.
(C) The sector with the smallest angle is the smallest.
(D) The sector with the largest angle is the smallest.
170. If a pie chart has 8 sectors, each representing 12.5%, what is the total percentage of the chart?
- (A) 75%
(B) 90%
(C) 80%
(D) 100%
171. The pie chart shows the types of pastries sold at a shop. Half of the pastries sold were tuna or vegetable pastries. What fraction of the pastries sold were seafood?
- (A) $\frac{1}{2}$
(B) $\frac{1}{6}$
(C) $\frac{1}{4}$
(D) $\frac{2}{3}$
172. The pie chart provided below gives the distribution of land under various food crops. Study the pie-chart carefully and answer the questions. 2) If the production of wheat is 6 times that of barley, then what is the ratio between the yield per acre of wheat and barley?
- (A) 3:2
(B) 3:1
(C) 12:1
(D) 2:3
173. According to the pie chart, what YEAR is the data referring to?
- (A) 2015
(B) 2016
(C) 2017
(D) 2021
174. What is the fraction of GREEN slices?
- (A) $\frac{3}{8}$
(B) $\frac{2}{8}$
(C) 2
(D) $\frac{4}{8}$
175. Which sector of the pie chart represents 25% of the total data?
- (A) One-fifth sector
(B) Three-fourth sector
(C) Half sector
(D) One-fourth sector
176. A chart shows the distribution of different gases in Earth's atmosphere. If nitrogen makes up 78% of the atmosphere, which type of chart would best display this information?
- (A) Line graph
(B) Bar chart
(C) Pie chart
(D) Histogram
177. How will you graphically represent expenditure in different departments?
- (A) Column Chart
(B) Line Chart
(C) Dot Chart
(D) Pie Chart
178. The pie chart shows how a group of adults travel to work. How many adults ride the motorcycle to work?
- (A) 500
(B) 420
(C) 350
(D) 150

179. What does the pie chart in the example represent?
- (A) Percentage of students opting for different games
 - (B) Percentage of students in each grade
 - (C) Percentage of students who play sports
 - (D) None of the above
180. What is the name of the chart?
- (A) Column chart
 - (B) Bar Chart
 - (C) Pie Chart
 - (D) Line Chart
181. Diagram illustrating usage of Professional Standards.
- (A) A bar graph showing 50% usage
 - (B) A line chart indicating 60% usage
 - (C) A pie chart illustrating that 73% of individuals used the Professional Standards.
 - (D) A scatter plot with no clear trend
182. How can you compare two data sets using pie charts?
- (A) Use a bar chart instead of a pie chart for comparison
 - (B) Combine the data sets into one pie chart and compare the slices
 - (C) Use a line graph to compare the data sets
 - (D) Create separate pie charts for each data set and compare the sizes of the slices visually.
183. Shown below is a pie chart presenting the allocation of the annual budget of Highland City for the year 2019. The annual budget of Highland City for the year 2019 is Php 100 000 000. How much larger is allocated to Infrastructure than to Environmental Preservation?
- (A) Php 5 000 000
 - (B) Php 10 000 000
 - (C) Php 20 000 000
 - (D) Php 25 000 000
184. The pie-chart given in figure, shows the annual agricultural production of an Indian state. If the total production of all the commodities is 81000 tonnes, find the production (in tonnes) of Wheat.
- (A) 13500
 - (B) 27000
 - (C) 6750
 - (D) 11520
185. When visualizing data that can be expressed as parts or percentages of your whole dataset, which of the following is the most useful visualization type?
- (A) Bar Chart
 - (B) Pie Chart
 - (C) Histogram
 - (D) Line Chart
186. Based on the following pie chart, what is this household's total monthly income?
- (A) \$1900
 - (B) \$2400
 - (C) \$3100
 - (D) \$3300
187. The circle graph shows the percentage of names. What is the percentage of people named Kaias?
- (A) 60%
 - (B) 25%
 - (C) 50%
 - (D) 75%
188. Which sector of the pie chart is the largest?
- (A) The sector with the most colors is the largest.
 - (B) The sector closest to the center is the largest.
 - (C) The sector with the smallest angle is the largest.
 - (D) The sector with the largest angle in the pie chart is the largest.
189. The pie chart shows how Mr Yeo spends his monthly salary. Find the percentage for MEALS.
- (A) 50%

- (B) 20%
(C) 30%
(D) 25%
- 190.** Which option represents the fraction of shaded portion of the circle?
(A) $\frac{1}{3}$
(B) $\frac{1}{5}$
(C) $\frac{6}{36}$
(D) None of the above
- 191.** In a club election, 200 votes were cast. The circle graph below shows the results. How many votes did Jo get?
(A) 12 votes
(B) 23 votes
(C) 46 votes
(D) 62 votes
- 192.** Shown below is the allocation of Delos Reyes family's monthly budget to their domestic expenses. The monthly budget of Delos Reyes' family is Php 35800. How much is allocated to Education and Food?
(A) Php 7160 for Education, Php 15 000 for food
(B) Php 3580 for Education, Php 10 740 for food
(C) Php 7160 for Education, Php 10 740 for food
(D) Php 3580 for Education, Php 15 000 for food
- 193.** If the green sector of the pie chart is 60 degrees, what percentage does it represent?
(A) 50%
(B) 25%
(C) 16.67%
(D) 33.33%
- 194.** The pie-chart shows the expenditure incurred in publishing a book. If publisher pays Rs. 30,600 in total, then what will be amount of royalty to be paid for these books?
(A) Rs. 4,590
(B) Rs. 7,650
(C) Rs. 6,120
(D) Rs. 3,060
- 195.** The given pie charts show expenditure of a family on various items in July and August. On which item the expenditure remained constant?
(A) Education
(B) Grocery
(C) Electricity and Phone Bills
(D) Miscellaneous
- 196.** The graph represents Leslie's \$3,000 monthly budget. How much money does Leslie spend on rent and food?
(A) \$66.67
(B) \$1,350.00
(C) \$1,500.00
(D) \$1,725.50
- 197.** Which parameter would be used to separate a segment from the pie chart?
(A) Offset
(B) Explode
(C) Spread
(D) Space
- 198.** In the given pie chart, what percentage of people like comedy movies?
(A) 20%
(B) 25%
(C) 5%
(D) None of the above
- 199.** What is the largest segment of this pie chart?
(A) 16%
(B) 22%
(C) 25%
(D) 37%
- 200.** In the above pie chart, which animal is in the largest number?
(A) Donkey
(B) Cow
(C) Goat
(D) Dog

- 201.** What is the total angle of all sectors in a pie chart?
(A) 360 degrees
(B) 180 degrees
(C) 270 degrees
(D) 90 degrees
- 202.** The pie chart represents 39 people. How many chose red?
(A) 7
(B) 13
(C) 26
(D) 15
- 203.** A pie chart is represented by a ____
(A) Pie
(B) Square
(C) Circle
(D) Triangle
- 204.** If segment B is 25% of the pie chart, what percentage do the other segments represent combined?
(A) 50%
(B) 100%
(C) 75%
(D) 25%
- 205.** The result of an annual examination of a class, showing the percentage of students passed in first division is 25%, then the central angle representing first division category students is
(A) 36°
(B) 90°
(C) 172°
(D) 45°
- 206.** Coach Martin surveyed 250 students about their favorite sport and recorded the data in a pie graph. Which sport was the most popular?
(A) Chess
(B) Badminton
(C) Baseball
(D) Table tennis
- 207.** How can you ensure that a pie chart is visually appealing and easy to understand?
(A) By using unclear labels and a simple color scheme
(B) By using a simple color scheme and overcrowding with too many categories
(C) By using a complex color scheme and overcrowding with too many categories
(D) By using clear labels, a simple color scheme, and avoiding overcrowding with too many categories.
- 208.** What type of chart looks like a circle divided into slices?
(A) Pie chart
(B) Line chart
(C) Bar chart
(D) None of above
- 209.** How can you enhance the readability of a pie chart?
(A) By increasing the number of wedges
(B) By adding a legend
(C) By decreasing the size of the chart
(D) By removing labels
- 210.** What kind of chart is this?
(A) Pie chart
(B) Bar chart
(C) Column chart
(D) None of above
- 211.** The pie chart shows how pupils of River of Praise School travel to school. What percentage of the pupils travel to school by tricycle?
(A) 55%
(B) 65%
(C) 45%
(D) 25%
- 212.** The pie chart represents 20 people. How many chose green?
(A) 20
(B) 10
(C) 15
(D) 5

213. Students at Front High School were asked their hourly wage at their after school jobs. The results from 35 students are shown in the circle graph. Which graph represents the same data?
- (A)
(B)
(C)
(D)
214. What is the main advantage of using a pie chart to represent data?
- (A) It allows for easy comparison of different categories
(B) It provides detailed numerical information
(C) It can represent complex relationships between variables
(D) It is suitable for displaying time series data
215. What is the total percentage represented by this pie chart?
- (A) 37%
(B) 100%
(C) 0%
(D) There is no total.
216. How can you determine the size of each sector in a pie chart?
- (A) Count the number of categories and divide 360 by the count
(B) Calculate the percentage of each category by dividing the value of the category by the total value and multiplying by 100.
(C) Use a protractor to measure the angle of each sector
(D) Guess the size based on personal estimation
217. Which type of data chart is good for showing how a whole is divided up?
- (A) Bar graph
(B) Line graph
(C) Pie chart
(D) None of the above
218. If a pie chart has 5 categories and one category occupies 25% of the chart, what is the angle of that category?
- (A) 360 degrees
(B) 90 degrees
(C) 45 degrees
(D) 180 degrees
219. The pie chart shows how a group of adults travel to work. What fraction of the adults take the motorcycle to work? Hint: Total is 1420.
- (A) $\frac{10}{30}$
(B) $\frac{10}{25}$
(C) $\frac{21}{71}$
(D) $\frac{7}{25}$
220. There were a group of people at a food court. Each person ordered only one type of food. The pie chart represents the food they ordered. How many more people ordered fried rice than noodle?
- (A) 75 people
(B) 125 people
(C) 150 people
(D) None of above
221. What type of chart is useful for comparing parts of a whole?
- (A) Pie Chart
(B) Column Chart
(C) Line Chart
(D) Dot Graph
222. The divisions in a pie chart are called ____
- (A) Triangles
(B) Slices
(C) Sectors
(D) Categories
223. Identify the section that represents the largest portion of the pie chart.
- (A) The section that is the smallest in size.
(B) The section with the lowest percentage of the total.

- (C) The section with the highest percentage of the total.
(D) The section that is labeled 'Other' in the chart.
- 224.** Pie charts should always have what?
(A) Labels on the axis and a title (as well as the data).
(B) Scale, key and a compass.
(C) A key and a title (as well as the data).
(D) A title-the rest we can work out!
- 225.** Representation of data in the form of circle is called ____
(A) Simple bar diagram
(B) Multiple bar diagram
(C) Line curve
(D) Pie diagram
- 226.** If the pink sector of the pie chart is 72 degrees, what percentage does it represent?
(A) 20%
(B) 30%
(C) 15%
(D) 25%
- 227.** A ____ is chart in which the individual components are enhanced.
(A) Pie
(B) Exploded pie
(C) Line
(D) Column
- 228.** This pie chart shows what percentage of students study each subject in Year 10. What percentage study geography?
(A) 8%
(B) 12%
(C) 21%
(D) 25%
- 229.** How would you calculate the angle corresponding to Dumbo?
(A) $15/360 \times 100$
(B) $22/100 \times 360$
- (C) 22/100
(D) 360/22
- 230.** The circle graph shown shows the results of a survey about favorite pizza toppings for people living in the United States. If this survey included 2,500 people, how many people said cheese is their favorite topping? (hint: multiply the percent by the number of people!!)
(A) 100 people
(B) 625 people
(C) 10,000 people
(D) 1,250 people
- 231.** Earth Fitness tracked the usage of cardio equipment to determine how many members used certain pieces of equipment last weekend. The circle graph below shows the results. How many of the 400 members that used cardio equipment did not use a stepper or a treadmill?
(A) 152 students
(B) 38 students
(C) 62 students
(D) 248 students
- 232.** The circle graph shows the results of a poll that asked students about their favorite after school activity/elective. If there are 300 seventh graders, how many students prefer choir?
(A) 96
(B) 24
(C) 75
(D) 42
- 233.** This pie chart shows what percentage of students study each subject in Year 10. What percentage studied science? (Remember percentages should always add up to 100.)
(A) 28%
(B) 30%
(C) 32%
(D) 34%
- 234.** The pie chart shows the colours of 32 beads. How many green beads are there?

- (A) 90
(B) 8
(C) 11
(D) 9
235. What does the term 'proportion' mean in the context of a pie chart?
(A) A type of dessert.
(B) A musical instrument.
(C) A part or portion of a whole.
(D) A style of painting.
236. A sport shop sold 80 balls on a certain day. the pie chart represents the quantity of each types of balls sold. what percentage of the balls sold were footballs?
(A) 40%
(B) 50%
(C) 90%
(D) 25%
237. If section F is 10% of the pie chart, what is the percentage of the remaining sections combined?
(A) 80%
(B) 90%
(C) 60%
(D) 70%
238. The circle graph shows how Roma budgets her allowance of P 400.00 a week. 1.How much is spent for lunch and snacks?
(A) Php 252.00
(B) Php 253.00
(C) Php 254.00
(D) Php 255.00
239. If the pie chart shows 40% for section C, what percentage is left for the other sections?
(A) 50%
(B) 70%
(C) 60%
(D) 80%
240. Based on the following pie chart, what part of this household's total monthly income is spent on food?
(A) 13%
(B) 19%
(C) 25%
(D) 50%
241. What percentage does a whole circle graph represent?
(A) 360%
(B) 90%
(C) 50%
(D) 100%
242. A graph to show the percent of Somali and Karen students at Como.
(A) Pie Chart
(B) Bar Graph
(C) Line Graph
(D) None of above
243. Compare the data represented in two pie charts and determine which category has the smallest percentage difference between the charts.
(A) Category Z has the smallest percentage difference between the two pie charts.
(B) Category Y has the smallest percentage difference between the two pie charts.
(C) Category A has the smallest percentage difference between the two pie charts.
(D) Category X has the smallest percentage difference between the two pie charts.
244. Complete this sentence with vocabulary for a pie chart:The sector with ____ of sport chosen by women was hockey, at 50%
(A) Least popular
(B) The highest percentage
(C) Ranked second
(D) None of above
245. The pie chart shows the mother tongue languages of a class of students. Find the percentage for others.

- (A) 10%
(B) 12%
(C) 20%
(D) 18%
- 246.** A pie chart displays the favourite fruits of a class. If 40% of students chose apples and there are 30 students, how many chose apples?
(A) 15
(B) 10
(C) 12
(D) 20
- 247.** What does each wedge in a pie chart represent?
(A) Mean of the dataset
(B) Median of the dataset
(C) Proportion of the whole corresponding to a category
(D) Standard deviation of the dataset
- 248.** In a pie chart showing favorite fruits, if apples make up 30% and bananas make up 20%, what percentage do oranges represent?
(A) 50%
(B) 40%
(C) 60%
(D) 25%
- 249.** Name the graph or chart below.
(A) Pictograph
(B) Bar Chart
(C) Pie Chart
(D) None of above
- 250.** A pie chart shows the distribution of snacks chosen by kids at a party: 30% chose chips, 50% chose cookies, and 20% chose fruit. If 60 snacks were chosen, how many were cookies?
(A) 40
(B) 30
(C) 50
(D) 20
- 251.** A circle in which sectors represents various quantities is called
(A) Bar Chart
(B) Histogram
(C) Frequency Polygon
(D) Pie Chart
- 252.** A geometric representation showing the relationship between a whole and its part, is a
(A) Pie chart
(B) Histogram
(C) Bar graph
(D) Pictograph
- 253.** Which data viz example in the Edpuzzle used an example of survey data on social media habits for their data visualization?
(A) Bar Chart
(B) Pie Chart
(C) Histogram
(D) Line Chart
- 254.** How many birds are represented by the green sector?
(A) 5
(B) 20
(C) 9
(D) 13
- 255.** In the Pie-Chart, the percentage of different blood types of 25 donors are given. Identify the maximum blood type of donors.
(A) Type A
(B) Type B
(C) Type AB
(D) Type O
- 256.** The pie chart shows the colours of 32 beads. How many red and pink beads are there?
(A) 90
(B) 8
(C) 11
(D) 9

257. The pie chart shows the types of animals 60 pupils kept as pets. What PERCENTAGE of the pupils kept CATS?
- (A) 18%
(B) 70%
(C) 30%
(D) 20%
258. This pie chart represents my student's favorite season. Which season do they love the most?
- (A) Summer
(B) Spring
(C) Autumn
(D) Winter
259. The chart below shows the percentages of different types of pets owned by the teachers and students at School # 324. Which of the following graphs most accurately represents the information in the chart?
- (A)
(B)
(C)
(D)
260. The per cent that represents the shaded region in the figure is
- (A) 36%
(B) 64%
(C) 100%
(D) 24%
261. This pie chart shows the colour of hats that Tim owns. What fraction of Tim's hats are blue?
- (A) $\frac{1}{4}$
(B) 25
(C) $\frac{1}{3}$
(D) 75
262. This pie chart shows what percentage of students study each subject in Year 10. Which is the most popular subject?
- (A) History
(B) Maths
(C) Geography
(D) Science
263. If segment H is 15% of the pie chart, what fraction of the pie chart does it represent?
- (A) $\frac{2}{15}$
(B) $\frac{1}{8}$
(C) $\frac{3}{20}$
(D) $\frac{1}{6}$
264. What is the fraction of BLUE slices?
- (A) $\frac{2}{5}$
(B) 3
(C) $\frac{3}{6}$
(D) $\frac{3}{5}$
265. In most charts, each data series is assigned a color or pattern to uniquely identify it. Which type of chart assigns a color to each data point instead of series?
- (A) Area
(B) Column
(C) Scatter
(D) Pie
266. Which of the following statements best interprets the data in the pie chart?
- (A) More student birthdays occurred in July than in August or September
(B) Most birthdays occurred during September.
(C) Thirty-two students had a birthday in August.
(D) Sixty-eight percent of the birthdays were in August and September.
267. The monthly income of family is Rs. 28800. The monthly expenditure of the family on education is Rs.3600, then the central angle for education will be
- (A) 10°
(B) 100°
(C) 70°
(D) 45°

268. A pie chart represents the types of transportation used by students to get to school. 50% walk, 30% ride bikes, and 20% take the bus. If there are 50 students, how many take the bus?
- (A) 5 students
(B) 10 students
(C) 15 students
(D) 20 students
269. In a pie chart showing the distribution of ice cream flavors, if chocolate represents 30%, vanilla represents 50%, and strawberry represents 20%, which flavor is the most popular?
- (A) Mint
(B) Coffee
(C) Chocolate
(D) Vanilla
270. The following pie chart shows the sources of funds to be collected by the NHAI for its Phase II projects. Study the pie chart and answer the questions that follow. 1) The central angle corresponding to Market Borrowing is:
- (A) 52
(B) 137.8
(C) 187.2
(D) 192.4
271. Based on the pie chart showing the distribution of students' preferences for engineering subjects, what is the total number of students who prefer Wireless Communication and VLSI Design combined?
- (A) 300
(B) 250
(C) 350
(D) 400
272. What is the difference between dynamic and static pie charts?
- (A) Dynamic charts show changes over time, static charts show changes over years
(B) Dynamic charts show changes over years, static charts show changes over time
(C) Dynamic charts show changes over years, static charts show information distributed in one year
(D) Dynamic charts show information distributed in one year, static charts show changes over years
273. What is the most common way to represent data in a pie chart?
- (A) Representing data in a bar chart format
(B) Using random colors for each section
(C) Using percentages of the whole circle
(D) Using Roman numerals instead of percentages
274. Explain the concept of proportional representation in a pie chart.
- (A) Each slice in a pie chart represents a random value
(B) Proportional representation in a pie chart is based on alphabetical order
(C) Each slice in a pie chart represents a proportion or percentage of the whole data set, with the size of each slice being proportional to the value it represents.
(D) The size of each slice in a pie chart is determined by the color used
275. The histogram shows the number of fish found at a certain depth of water on a fishing trip. If a circle graph was used to display the same information, what percentage of the circle graph would show the number of fish at the depth of 40 to 79 feet? (hint: $\frac{\text{part}}{\text{whole}}$)
- (A) 45%
(B) 50%
(C) 35%
(D) 25%
276. The pie chart shows the types of fruits sold by a supermarket in a week. What percentage of the fruits sold were apples?
- (A) 5%
(B) 10%
(C) 95%
(D) None of above

277. The percent values in any circle graph should add up to ____
(A) The total number of data pieces represented in the graph
(B) 100
(C) 1
(D) 50
278. A darts player hits his target 40% of the time. Which pie chart represents his hits and misses?
(A)
(B)
(C)
(D)
279. The pie chart shows the number co-curricular activities of Secondary students. What is the percentage of students joining the Art Club?
(A) 15 %
(B) 20 %
(C) 25 %
(D) 30 %
280. Favorite ice creams are shown in the chart. What size of angle represents Caramel?
(A) 60
(B) 90
(C) 110
(D) 105
281. The pie chart shows the types of animals 60 pupils kept as pets. What FRACTION of the pupils kept FISH?
(A) $\frac{1}{6}$
(B) $\frac{1}{3}$
(C) $\frac{3}{10}$
(D) $\frac{1}{5}$
282. The pie chart shows the types of mixed juices sold at a drinks stall. What percentage of the drinks sold was Summer Joy?
(A) 12%
(B) 38%
(C) 52%
(D) 90%
283. A graph that displays the relationship of parts to a whole.
(A) Pie
(B) Line
(C) Bar
(D) Table
284. All of the boys attending a prom wore a tuxedo. The circle graph below shows the number of boys wearing each of the different bow tie colors. Based on the graph, approximately what percent of the boys wearing tuxedos at the prom was wearing black bow ties? (Black bow ties are indicated by the section of the circle graph that is shaded the darkest.)
(A) 33%
(B) 25%
(C) 200%
(D) 66%
285. Part of a pie chart that represents one value from the series.
(A) Axis
(B) Data
(C) Slice
(D) Chart
286. If 35% of the people residing in a locality are using two wheelers, then the central angle of the sector representing it, in the pie chart would be
(A) 108°
(B) 115°
(C) 126°
(D) 135°
287. How can you find the percentage of a category in a pie chart?
(A) Divide the area of the sector by the total area of the pie chart
(B) Count the number of categories in the chart

- (C) Calculate the angle of the sector for the category and then use the formula: $(\text{Sector angle} / 360) \times 100\%$
- (D) Use the color intensity of the category in the chart
- 288.** Using the pie graph, which resource shows the greatest consumption by the US?
- (A) Renewable energy
- (B) Coal
- (C) Natural gas
- (D) Petroleum
- 289.** The pie chart shows the types of animals 60 pupils kept as pets. What FRACTION of the pupils kept HAMSTERS?
- (A) $\frac{1}{6}$
- (B) $\frac{1}{3}$
- (C) $\frac{3}{10}$
- (D) $\frac{1}{5}$
- 290.** In a pie chart, 40% of the chart represents students who play video games. If there are 60 students in total, how many students play video games?
- (A) 24
- (B) 12
- (C) 30
- (D) 18
- 291.** Which pie chart correctly shows the percentages of elements in the air?
- (A) A
- (B) B
- (C) C
- (D) D
- 292.** The pie chart shows the mass of some items in a hamper. The mass of the nuts is the same as the mass of the drinks. What fraction of the total mass of items is the mass of chocolates?
- (A) $\frac{1}{8}$
- (B) $\frac{1}{12}$
- (C) $\frac{2}{9}$
- (D) $\frac{3}{8}$
- 293.** If there are total of 80 students in the given pie chart above, how many of them favor PE?
- (A) 10
- (B) 20
- (C) 24
- (D) 18

1.4.5 Histogram Data Interpretation

- 1.** According to the histogram, 2 students ran 5 laps and 2 students ran 6 laps.
- (A) True
- (B) False
- (C) Not enough information
- (D) None of above
- 2.** The histogram shows the birth weights of 100 new born babies. What percent of babies weighed between 6 and 7 pounds?
- (A) 15%
- (B) 45%
- (C) 30%
- (D) 25
- 3.** The histogram shows the total number of participants in different age groups at a swim class. Which statement about the data in the histogram is NOT true?
- (A) The swim class has a total of 16 participants.
- (B) The swim class has 2 participants younger than 2 years old.
- (C) More than half the participants are from 7 to 9 years old.
- (D) Exactly 5 participants are younger than 5 years old.
- 4.** What was the exact price most people paid for a gallon of gas?
- (A) \$2.10

- (B) \$1.95
(C) \$2.03
(D) We can not tell using the histogram
5. According to the histogram, how many more students slept 4-7 hours than 12-15 hours?
(A) 6
(B) 9
(C) 12
(D) 15
6. Mrs. Keegan's math class made paper airplanes and measured how far they flew. The class organized the distances into the histogram below. What fraction of students threw their paper airplanes at least 40 feet?
(A) $\frac{1}{7}$
(B) $\frac{7}{28}$
(C) $\frac{3}{14}$
(D) $\frac{11}{28}$
7. The histogram shows customers' monthly cell phone bills. Use the graph to answer the question: How many people's cell phone bills were between \$36 and \$44?
(A) 2
(B) 4
(C) 7
(D) 3
8. A florist recorded the number and cost of flower bouquets that were sold daily and recorded the data in the table. Which histogram represents the same data?
(A)
(B)
(C)
(D)
9. According to the histogram, more than half of the cities received 34 or more inches of annual rainfall.
(A) True
(B) False
(C) Not enough information
(D) None of above
10. For a particular city, the height of all the buildings within the city were measured and the results were compiled into the accompanying histogram above. About how many buildings measure between 201 and 250 feet tall?
(A) 16.5
(B) 11
(C) 22
(D) 10
11. A school advisor wanted to do some research for an advisee who was interested in becoming a plumber, and wanted an idea of what his salary could be. The advisor finished his research and handed his advisee the given histogram which presented his findings on the salaries of plumbers in the area. About how many plumbers make between \$41,000 and \$80,000?
(A) 30
(B) 50
(C) 70
(D) 90
12. An online shopping website keeps track of its sales numbers. In particular, they keep track of how many packages each customer orders per month. These numbers are presented in the histogram above. How many people order 21-25 packages a month?
(A) 9
(B) 14
(C) 16
(D) 8
13. A study was done on the price of gas per gallon across several states in the United States. The prices were compiled and are displayed in the accompanying histogram. What is the frequency of the gas price being between \$2.01 and \$2.50?
(A) 10
(B) 12
(C) 15
(D) 4

14. According to the histogram, how many people slept at least 8 hours?
(A) 6
(B) 9
(C) 12
(D) 15
15. The histogram shows the birth weights of 100 new born babies. How many babies weighed 8 pounds or more?
(A) 22
(B) 23
(C) 30
(D) 45
16. A group of contestants were challenged to solve the same puzzle individually. They were timed and their total time in seconds was recorded once they finished the puzzle. The results of the contest are displayed in the histogram above. How many contestants completed the puzzle in less than 151 seconds?
(A) 16
(B) 29
(C) 9
(D) 25
17. Walter surveyed random lawyers on their yearly salary and recorded them in the table. Which histogram represents the data correctly?
(A)
(B)
(C)
(D)
18. Based on the histograms, which is a true statement?
(A) Some DX Comics movies made more than some Marble Comics Movies.
(B) The DX Comics movie with the greatest revenue made more than the Marble Comics movie with the greatest revenue.
(C) All Marble Comics movies made more money than every DX Comics movies.
(D) None of above
19. According to the histogram, there are 3 cities that had an annual rainfall of exactly 30 inches.
(A) True
(B) False
(C) Not enough information
(D) None of above
20. The accompanying histogram shows the scores of students on a Math A test. How many students have scores of 96 to 100?
(A) 55
(B) 20
(C) 5
(D) 4
21. Look at the histogram. How many students owned less than 10 pets?
(A) 8
(B) 3
(C) 12
(D) None of above
22. A survey was conducted to see how many cats pet owners own. The results of the survey are displayed in the histogram above. About how many pet owners owned between 12-14 cats?
(A) 5
(B) 12
(C) 22
(D) 15
23. Coach Tyler organized his student's mile times into the histogram below. What statement about the histogram is NOT true?
(A) There are 32 students represented in the histogram.
(B) More students ran 9 minutes or slower than students who ran faster than 7 minutes.
(C) The number of students who ran faster than 6 minutes is the same as students who ran 10 minutes or slower.
(D) 37.5% of the students ran 9 minutes or slower.

24. How many students are between 60 and 63 inches tall?
- (A) 3
 - (B) 0
 - (C) 12
 - (D) 7
25. What is the percentage of classrooms that have at most 25 students?
- (A) This information cannot be determined by the histogram.
 - (B) 50%
 - (C) 40%
 - (D) 30%
26. The histogram represents the heights of 57 students in Mr. Arnett's morning math classes. How many more students are between the heights of 150-154 cm. than between the heights of 145-149 cm.?
- (A) 3 students
 - (B) 5 students
 - (C) 6 students
 - (D) 20 students
27. The histogram above shows the results of a survey that asked people under the age of 30 how many times they have traveled on a plane. About how many people have flown between 4 and 11 times on a plane?
- (A) 250
 - (B) 70
 - (C) 105
 - (D) 180
28. Which of the following statements does NOT describe the histogram?
- (A) Over half of the zoos charge \$9 or less.
 - (B) The median ticket price is between \$10 and \$14.
 - (C) Six zoos had ticket prices between zero and four dollars.
 - (D) Tickets over \$20 were not available.
29. The histogram shows results of a Mathematics test. How many students scored more than 50%?
- (A) 20
 - (B) 50
 - (C) 40
 - (D) 30
30. How many more pies have 60-89 cherries than 120-149 cherries?
- (A) 7 pies
 - (B) 13 pies
 - (C) 17 pies
 - (D) 5 pies
31. A student kept track of how many strikeouts his favorite professional baseball player earned every season and used the data to create a histogram for a statistics course. The histogram he created is displayed above. In how many seasons did the pitcher have 101-125 strikeouts?
- (A) 0
 - (B) 2
 - (C) 3
 - (D) 4
32. The histogram displays how many students are in each classroom during homeroom. What percentage of classrooms have 25 students or less?
- (A) 23%
 - (B) 45%
 - (C) 48%
 - (D) 88%
33. According to the histogram, there were 15 cities with no more than 33 inches of annual rainfall.
- (A) True
 - (B) False
 - (C) Not enough information
 - (D) None of above
34. Mrs. Green gives swimming lessons. The histogram represents the number of students in

- each age group. How many of her students are 6-8 years old?
- (A) 4
 - (B) 7
 - (C) 8
 - (D) None of above
35. A study was conducted to see how many hours of TV people watch per day. The study concluded and the results were shared in the form of the histogram above. How many more people watch 0-1 hours of TV per day than those who watch 3-4 hours per day?
- (A) 80
 - (B) 20
 - (C) 40
 - (D) 50
36. Tommy gathered data on his favorite baseball player to see how many home runs he hit during each of season. The result of his data gathering is the histogram above. In how many seasons did the player hit between 21 and 25 home runs?
- (A) 3
 - (B) 2
 - (C) 4
 - (D) 5
37. According to the histogram, which country recorded the most immigrants between 1901-1910
- (A) Denmark
 - (B) Netherlands
 - (C) Norway
 - (D) Sweden
38. The histogram above shows the total number of books read by students in the Principal's Reading Club during the school year. How many books were read from January through April.
- (A) 85
 - (B) 80
 - (C) 95
 - (D) 87
39. According to the graph, about how many trees are between 150 and 200cm tall?
- (A) 4 trees
 - (B) 11 trees
 - (C) 27 trees
 - (D) 30 trees
 - (E) 50 trees
40. The graph below shows the distribution of scores of Ms. Hall's 1st period students on a math test. Based on the histogram, which statement(s) must be true? Select all that apply.
- (A) Only 1 student scored between 61-70.
 - (B) Less students passed the test than failed the test. (Passing = 71 or higher)
 - (C) 5 more students scored between 81-90 than scored between 91-100.
 - (D) There are 30 students in first period.
 - (E) 10% of the students scored between 41-50.
41. The histogram shown represents the numbers of clients (in thousands) Investopedia has by age group. Altogether, Investopedia represents 50,500 customers. Approximately what percentage is the 31-40 group?
- (A) 12%
 - (B) 25%
 - (C) 33%
 - (D) 50%
42. The histogram shows the total number of guests in different age groups at a restaurant. How many guests are less than 50 years old?
- (A) 25 guests
 - (B) 16 guests
 - (C) 8 guests
 - (D) 15 guests
43. The histogram represents a survey from 390 families about the number of children in each family. How many families from the survey have more than 3 children in their family?
- (A) 75 families
 - (B) 130 families

- (C) 205 families
(D) 260 families
44. How many countries had between 1-10 athletes?
(A) This information cannot be determined by the histogram.
(B) 5 countries
(C) 1 country
(D) Between 1-4 countries
45. A group of contestants were challenged to solve the same puzzle individually. They were timed and their total time in seconds was recorded once they finished the puzzle. The results of the contest are displayed in the histogram above. Which option below best describes the shape of the histogram?
(A) The histogram is bell shaped.
(B) The histogram is skewed right.
(C) The histogram is skewed left.
(D) The histogram has no shape.
46. What is the total number of cities included in the histogram?
(A) 56
(B) 70
(C) 62
(D) 60
47. The histogram shows the total number of participants in different age groups at a swim class. How many participants are older than 4 years old?
(A) 5 participants
(B) 11 participants
(C) 6 participants
(D) 3 participants
48. The histogram shown represents the numbers of clients (in thousands) Investopedia has by age group. Which age group is the least involved in Investopedia?
(A) 0-10
(B) 11-20
(C) 61-70
(D) 71-80
49. What is the best salary prediction looking at this histogram?
(A) \$52,000
(B) 67,000
(C) 42,000
(D) 89,000
50. The histogram shows the number of rebounds per game for a middle school basketball player this season. Based on the histogram, which statement(s) must be true? Select all that apply.
(A) The player played 4 games this season.
(B) The player made 3 or less rebounds in more than half of the games.
(C) In most games, the player scores 2-3 rebounds.
(D) None of above
51. Cosmic, Inc. is a software company with 30 employees. The ages of the employees are displayed in the histogram. How old is the youngest employee?
(A) 10
(B) 15
(C) 19
(D) Cannot be determined
52. Ken is going to buy an automobile and needs to spend less than \$35,000 in order to afford the monthly payment. Looking at the histogram, how many automobiles does Ken have to choose from?
(A) 125
(B) 105
53. The histogram shows the total number of headphones sold in different price ranges at an electronics store. How many more headphones cost \$31-\$35 than \$21-\$25?
(A) 25 headphones
(B) 35 headphones
(C) 15 headphones
(D) 10 headphones

54. A school conducted a survey to see how many exams were given out in each class across an entire year. The results are displayed in the histogram above. How many more classes gave 2-3 exams as opposed to those classes that gave 0-1?
- (A) 5
(B) 0
(C) 7
(D) 2
55. A study was conducted to see how many hours of TV people watch per day. The study concluded and the results were shared in the form of the histogram above. How many people watched TV 1-2 hours a day?
- (A) 80
(B) 60
(C) 40
(D) 10
56. The histogram summarizes attendance of home football games over the past two years. How many home games were attended by at least 700 people?
- (A) 2
(B) 3
(C) 5
(D) 9
57. This histogram shows the number of minutes it takes some children to get to school. Which describes the shape of the data?
- (A) Skewed right
(B) Skewed left
(C) Symmetrical
(D) Uniform
58. The histogram below shows the amount of money people saved in the last week. What percent of people saved less than \$21 last week?
- (A) 25%
(B) 40%
(C) 60%
(D) 55%
59. A survey of a high school track team asked the 40 members how many hours per week (rounded to the nearest hour) they spend running outside of team practices. The 40 responses are summarized in the histogram below. To the nearest hundredth of an hour, what is the average number of hours spent running for the 40 respondents?
- (A) 2.75
(B) 2.90
(C) 3.25
(D) 3.40
(E) 6.00

1.4.6 Mixed Graph Data Interpretation

1. Combines more than one type of chart for example, a column chart and a line chart, which would easily identify data that reflects an average
- (A) Combo
(B) Line
(C) Pie
(D) Radar
2. What is the purpose of a combo chart?
- (A) Visualizing data with multiple levels of categorization
(B) Showing the relative importance of data
(C) Displaying geographic information
(D) Combining two different chart types
3. A chart which is a combination of two or more chart types is known as ____
- (A) Combine Chart
(B) Combination Chart
(C) Combo Chart
(D) Combi Chart

1.4.7 Comparison Based Data Interpretation

1. The Majestic mall has more restaurants than the Star Mall. The Wave Mall has fewer restaurants than the Star Mall. The Majestic Mall has more restaurants than Wave Mall. If the first two statements are true, the third statement is
(A) False
(B) True
(C) Uncertain
(D) None of above
2. How many more people studied for 0-30 minutes than people who studied for 121-150 minutes?
(A) 3
(B) 6
(C) 5
(D) 4
3. The Kingston Mall has more stores than the Galleria. The Four Corners Mall has fewer stores than the Galleria. The Kingston Mall has more stores than the Four Corners Mall. If the first two statements are true, the third statement is
(A) True
(B) False
(C) Uncertain
(D) None of above
4. Residents of Shelby, NC were surveyed about their favorite pie. How many more chose Key Lime pie over Coconut Cream pie?
(A) 11
(B) 5
(C) 9
(D) 18
5. How many more learners chose mango drink than pineapple drink?
(A) 5
(B) 10
(C) 15
(D) 20
6. Eighteen out of 24 of Emil's Cd's are country music. Five out of 8 of Imani's CD's are country music. Which is a true statement?
(A) Half of each CD collection consists of country music.
(B) Less than half of each CD collection consists of country music.
(C) Emil has a greater fraction of country music than Imani.
(D) Imani has a greater fraction of country music than Emil.
7. There are 686,923 people living in Alaska. There are 873,092 people living in Delaware. Which state has the greater population?
(A) Alaska
(B) Delaware
(C) They are the same
(D) None of above
8. Which of these values is the LEAST?
(A) 0
(B) -3
(C) 65%
(D) $\frac{1}{2}$
9. Based on the graph, how many more students are in the science club than the book club?
(A) 20
(B) 16
(C) 46
(D) 18
10. An eight pack of juice boxes costs \$4.79, and a 12 pack of juice boxes cost \$6.59. Use this information to calculate the better buy.
(A) 8 pack
(B) 12 pack
11. How many more people said Comedy than Thriller as their favourite type of film?
(A) 2
(B) 5
(C) 8
(D) 10

12. Sally is deciding which of two different cereals she should buy. Chocon Pops costs \$0.84 for 200 g. Special Q costs \$0.36 for 100 g. Which of the cereal brands is cheaper to buy?
- (A) Chocon Pops: 60 cents cheaper / kg
(B) Chocon Pops: 48 cents cheaper / kg
(C) Special Q: 60 cents cheaper / kg
(D) Special Q: 48 cents cheaper / kg
13. Students voted for their favorite ice cream topping. How many more students chose marshmallows than chose nuts?
- (A) 4
(B) 6
(C) 10
(D) None of above
14. Brandi loves to eat Doritos. She ate $\frac{2}{8}$ of a bag on Monday, $\frac{7}{8}$ of a bag on Tuesday, and $\frac{3}{4}$ of a bag on Friday. Which day did she eat the MOST Doritos?
- (A) Monday
(B) Tuesday
(C) Friday
(D) None of above
15. The number of runners who ran 6-10 miles is ___ the number of runners who ran 36-40 miles
- (A) More than
(B) Less than
(C) Equal to
(D) None of above
16. Presented below are the annual profits of Letty's shop and Alice's shop for a three-year period (2018-2020). Based on the given graph, by how much larger was the annual profit of Alice's shop as compared to the annual profit of Letty's shop in 2019?
- (A) More than Php 20 000
(B) More than Php 10 000
(C) More than Php 10 000 but less than Php 20 000
(D) More than Php 5 000 but less than Php 10 000
17. Based on the provided data, calculate the total height of all boys and compare it to the total height of all girls. What is the difference?
- (A) 50
(B) 30
(C) 40
(D) 20
18. The pictograph shows the numbers of students in Vanessa's class that visited different states during summer vacation. How many more students visited Texas than Ohio?
- (A) 32
(B) 18
(C) 14
(D) 7
19. The table shows the masses of four rocks. Which number sentence correctly compares the masses of two of the rocks?
- (A) $0.403 > 0.423$
(B) $0.423 < 0.34$
(C) $0.432 > 0.403$
(D) $0.403 = 0.432$
20. How many more students scored a 88 than scored a 98 on the science test?
- (A) 4
(B) 2
(C) 6
(D) 35
21. According to this chart, which country spent the least money on books in 2004?
- (A) Germany
(B) France
(C) Italy
(D) Australia
22. Compare the rates that each rental store charges per hour.
- (A) Water's Edge Rafts has a lower rate because they charge \$6 per hour.
(B) Water's Edge Rafts has a lower rate because they charge \$5 per hour.

- (C) Ryan's Rafts has a lower rate because they charge \$2.25 per hour.
(D) Ryan's Rafts has a lower rate because they charge \$15.00 per hour.
23. How many more shells did Mabel collect on Day 2 compared to Day 1?
(A) 8
(B) 4
(C) 2
(D) 6
24. How many more cars than buses did they count?
(A) 2 more cars
(B) 3 more cars
(C) 4 more cars
(D) 5 more cars
25. How many more people chose science fiction than drama as their favorite type of movie?
(A) 4
(B) 10
(C) 1
(D) 3
26. Which is the best description of the chart?
(A) In Great Britain and USA, there are the same percentages of people who choose some kind of transport.
(B) In Germany, percentages of people who choose car and bicycle are roughly the different.
(C) Motorcycle was the most popular type of transport in all countries, except for the USA.
(D) Overall, car is the most chosen transport, bicycle is on the second place and motorcycle is the least chosen transport.
27. In this group of numbers 568,000-762,000-1,000 The greatest number is:
(A) 568,000
(B) 762,000
(C) 1,000
(D) None of above
28. The percentage of women having degrees in higher education ____ a low of 25% in Japan to a high of 45% in Germany
(A) Shift
(B) Fluctuates
(C) Ranges from
(D) Change
29. The graph shows the number of cars sold from January to April. How many more cars were sold in March than in January?
(A) 2,000
(B) 5,000
(C) 7,000
(D) 8,000
30. How many more people like Yummy O's than like Crispy Crunch?
(A) 8
(B) 3
(C) 2
(D) 18
31. How many more kids choose ice cream than soda?
(A) 60
(B) 40
(C) 20
(D) 10
32. Compare segment C and segment D. Which one is larger and by how much?
(A) Segment D is larger than segment C by Y units.
(B) Segment C is larger than segment D by X units.
(C) Segment C and segment D are equal in size.
(D) Segment C is smaller than segment D by Z units.
33. How many more students like basketball than softball?
(A) 3
(B) 4
(C) 2
(D) 6

34. What is the difference in the number of cities with the lowest temperature and highest temperature?
(A) 24
(B) 18
(C) 12
(D) 10
35. How many more students like Science than like Math?
(A) 5
(B) 2
(C) 4
(D) 10
36. My school is 3 Km from here, the market is 4 Km from here and the Town square is 5 Km from here. 7. which statement is not true?
(A) The school is nearer than market
(B) The market is nearer than the Town square
(C) The school is the nearest
(D) The market is the farthest
37. Fewer girls go to school and college than ____
(A) Boys
(B) Girls
38. How many more books did the class read in June than April?
(A) 15
(B) 25
(C) 10
(D) 20
39. How many more students have a birthday in June than in February?
(A) 4
(B) 9
(C) 0
(D) 6
40. How many more children walk than take a taxi to school?
(A) 45
(B) 20
(C) 25
(D) 35
41. How many more students are in Mr. Smith's class than in Mrs. Jones's class?
(A) 25 Students
(B) 5 Students
(C) 10 Students
(D) 15 Students
42. Put the following in order LEAST to GREATEST: 54%, 2/5, .45
(A) 2/5, .45, 54%
(B) 54%, 2/5, .45
(C) 54%, .45, 2/5
(D) .45, 2/5, 54%
43. The article states that 2.8% of Pakistan's GDP goes to education versus the UN's 4% recommendation. Which inference is MOST supported by this comparison?
(A) Pakistan intentionally underfunds education
(B) Pakistan's education system faces a significant funding deficit
(C) The UN's recommendation is unrealistic for developing nations
(D) Most countries meet the UN's 4% recommendation
44. "The 40-55 and 56-80 age groups spent almost the same amount of money on music concerts, at about \$7 million." What would you describe this sentence?
(A) A main difference
(B) Important numbers
(C) A similarity
(D) None of above
45. How many more people chose pizza than burger? Which number sentence shows how to solve this problem?
(A) $5 + 5 + 1 = 11$
(B) $5 + 4 = 9$
(C) $11 + 9 = 20$
(D) $11 - 9 = 2$

46. How many more students liked chips better than carrots?
(A) 8
(B) 6
(C) 9
(D) 7
47. How many more students biked to school in April than in February?
(A) 20 students
(B) 30 students
(C) 10 students
(D) None of above
48. How many more marks were obtained by the student in Mathematics than in Hindi?
(A) 25
(B) 15
(C) 20
(D) 10
49. Molly has 200 Pokemon cards, Lee has 301 Pokemon cards, and Michael has 196 Pokemon cards. Who has the least amount of cards?
(A) Molly
(B) Lee
(C) Michael
(D) They all have the same amount
50. Study the following graph carefully and answer the questions given below it: What was the price difference between commodity A and B in the month of July?
(A) 250
(B) 150
(C) 100
(D) 90
51. How many more girls than boys are there in Class 7A?
(A) 9
(B) 4
(C) 13
(D) 0
52. How many more students used sharpners than scales?
(A) 8 more
(B) 5 more
(C) 3 more
(D) 2 more
53. How many more students like Yellow juices than Purple juices?
(A) 3
(B) 4
(C) 6
(D) 8
54. An average tube bath uses 8 gallons of water and an average shower uses 6 gallons to provide baths for 60 men. How much more water will be needed if tubs are used instead of showers?
(A) 30 gallons
(B) 120 gallons
(C) 360 gallons
(D) 480 gallons
55. Elephant is 1,2 ton. Hippo is 1500 kg. Giraffe is 550 kg. Tiger is 0,75 ton. The lightest animal based on the data is ____
(A) Elephant
(B) Hippo
(C) Giraffe
(D) Tiger
56. How many more students choose keyboard than drums as their favorite musical instrument?
(A) 5
(B) 10
(C) 15
(D) 20
57. Ram appears for an exam. In paper A he scores 18 out of 70. In paper B he scores 14 out of 30. So in which paper did he perform better?
(A) Paper A
(B) Paper B

58. Jose sold 652 apples, 567 oranges, and 749 pears last week. Which fruit was sold the most?
- (A) Apples
(B) Oranges
(C) Pears
(D) None of above
59. How many fewer cherry pieces were there than lime pieces?
- (A) 6
(B) 9
(C) 2
(D) 7
60. How many more people said Action than Supernatural as their favourite type of film?
- (A) 2
(B) 5
(C) 8
(D) 10
61. What is the difference in the number of parks that had the most trees planted and the least trees planted?
- (A) 13
(B) 10
(C) 6
(D) 3
62. Team A has got 99 scores. Team B has got 69 scores. Team C and D have got 79 scores.
- (A) Team A isn't cleverer than team B.
(B) Team C isn't cleverer than team A.
(C) Team D isn't as clever as team C.
(D) Team B is the cleverest.

1.4.8 Percentage Based Data Interpretation

1. Jay bought jeans that cost \$45. They were 40% off. What was his discount?
- (A) \$18
(B) \$180
(C) \$1.80
(D) \$4.00
2. Calculate 5% of \$280 000
- (A) \$56 000
(B) \$1 400
(C) \$14 000
(D) None of above
3. Andre lives 1.6 km from school. What is 50% of 1.6 km?
- (A) 0.4 km
(B) 8 km
(C) 2.4 km
(D) 0.8 km
4. What percent of the people are between 60 and 62 inches tall?
- (A) 25
(B) 50
(C) 75
(D) 100
5. The percentage of number of students getting atleast 60% marks in Chemistry over those getting atleast 40% marks in aggregate is approximately?
- (A) 26%
(B) 27%
(C) 29%
(D) 31%
6. Out of 50 people, 8 said that their favorite ice cream flavor is vanilla. What percent of people chose vanilla?
- (A) 8%
(B) 16%
(C) 50%
(D) 18%
7. What is the number of students who participate in the fundraiser if 60% of 160 total students participated?
- (A) About 267 Students

- (B) 16 Students
(C) 32 Students
(D) 96 Students
8. At the concert last night, out of 250 people 185 of the were kids under 13 years old. What percent of the people were under 13 years old?
(A) 74%
(B) 26%
(C) 78%
(D) 30%
9. In a class of 30 children, 60% are girls. How many girls are in the class?
(A) 12
(B) 19
(C) 18
(D) 9
10. Amanda increased the amount of protein she eats every day from 48 g to 54 g. By what percentage did Amanda increase the amount of protein she eats?
(A) 11.1%
(B) 88.9%
(C) 112.5%
(D) 12.5%
11. Out of 14 beaches on the island, 5 are public beaches and the rest are private beaches. What percent of the beaches are public?
(A) 30%
(B) 36%
(C) 5%
(D) 65%
12. What does 10% mean
(A) 0.010
(B) 0.10
(C) 0.5
(D) 10/5
13. What percent of the tiles are green?
(A) 12
(B) 24
(C) 50
(D) 86
14. Approximately what percentage of people's favourite drink was coffee? (red)
(A) 15
(B) 25
(C) 50
(D) 75
15. There are 45 students who play a woodwind instrument in the school band. Of these, 18 play saxophone. What percent of these students play the saxophone?
(A) 40%
(B) 250%
(C) 8.1%
(D) 810%
16. A pizza shop has 25 employees. Of these, 14 are students. What percent are students?
(A) 14%
(B) 56%
(C) 33%
(D) None of above
17. Timothy earns a 15% commission on each household appliance he sells. If he sells 6 toasters at \$20 each, how much does he earn in commission?
(A) \$18
(B) \$3
(C) \$17
(D) \$4
18. The number of kids in a playground grew by 10% in thirty minutes. If there are 77 kids in the park now, how many were there before?
(A) 70
(B) 71
(C) 72
(D) None of above

19. Esteban has a jar of change in his room. He has 600 coins total, and 240 of them are pennies. What percentage of the coins are pennies?
- (A) 24%
(B) 72%
(C) 20%
(D) 25%
(E) 40%
20. What percentage of students want to play basketball?
- (A) 30
(B) 44
(C) 8
(D) 18
21. Find 78% of 160.
- (A) 128.4
(B) 124.8
(C) 124
(D) 128
22. In a team there are 240 members (Males and Females). Two-third of them are males. 15% of males are graduate. Remaining males are non-graduate. Three fourth of the females are graduate. Remaining females are non-graduate. 1) What is the difference between the number of females who are non-graduate and the number of males who are graduate?
- (A) 4
(B) 5
(C) 6
(D) 8
23. What percent of 20 is 5?
- (A) 1%
(B) 4%
(C) 25%
(D) 85%
24. The percent a quantity decreases from its original amount
- (A) Percent Decrease
(B) Scale Factor
(C) Percent Increase
(D) None of above
25. At a birthday party 40% of the children had an ice-cream. 150 children attended the party. How many had an ice-cream?
- (A) 60
(B) 70
(C) 80
(D) 90
26. About 75% of the Earth's surface is covered by water while the remaining surface is covered by land. Find the percentage of land.
- (A) 30%
(B) 100%
(C) 25%
(D) 20%
27. Name the two steps to calculating a percent of a number
- (A) Cross multiply then divide
(B) Change the decimal to a percent then cross multiply
(C) Change the percent to a decimal then divide
(D) Change the percent to a decimal then multiply
28. A Stationery seller had some Pens, Sharpeners, Erasers & Pencils. He sells 65% of the total units and still has 175 units. Originally, he had:
- (A) 588 units
(B) 400 units
(C) 272 units
(D) 500 units
29. How would you find 35% of 24?
- (A) Find the sum of 25% and 10% of 24
(B) Divide 24 by 35
(C) Subtract 35 and 24
(D) None of above

30. Penelope spent \$120 on groceries last week. This week she spent \$105. Find the percent change and classify as a percent increase or decrease.
- (A) 12.5% increase
(B) 12.5% decrease
(C) 14.3% increase
(D) 14.3% decrease
31. Of the 160 7th graders at CMS, 96 donate canned goods to the food drive. What percent of the 7th graders donated food?
- (A) 60%
(B) 66%
(C) 96%
(D) 99%
32. Kelloggs is making a family size box of Cheerios. The original box has 500 grams of cereal. The family size will have 20% more. Which number or variable represents 100% (the original amount of cereal)?
- (A) 20%
(B) 80%
(C) 500
(D) X
33. There are 32 students in a class. Nine of those students are women. What percent are men? (Round to the Nearest Tenth)
- (A) 71.9%
(B) 73.5%
(C) 32%
(D) 32.9%
34. Alison is driving from Houston to Dallas. She drives 180 miles. This is 75% of the trip. What is the distance from Houston to Dallas?
- (A) 180 miles
(B) 240 miles
(C) 135 miles
(D) 315 miles
35. What is 10% of 6?
- (A) 6
(B) 1
(C) 0.6
(D) 60
36. In a class of 50 students, 40 % are girls. Find the number of girls in the class?
- (A) 22 girls
(B) 20 girls
(C) 19 girls
(D) 12 girls
37. For which year, the percentage increase of foreign exchange reserves over the previous year, is the highest?
- (A) 1992-93
(B) 1991-92
(C) 1996-97
(D) 1993-95
38. Timothy eats p potatoes in May. In June Timothy ate 10% more potatoes. Select expression that best represents the potatoes he ate in June.
- (A) $1.10p$
(B) $0.10p$
(C) $110p$
(D) $10p$
39. What's another way to describe 80%?
- (A) Four-fifths
(B) Slightly less than three-quarters
(C) Slightly over four-fifths
(D) None of above
40. Write 25% as a decimal.
- (A) 0.25
(B) 02.5
(C) 2500
(D) 25
41. The price of a pair of shoes increases from \$32 to \$36 What is the percent increase?
- (A) 25%
(B) 125%
(C) 13%
(D) 12.5%

42. The foreign exchange reserves in 1996-97 were approximately what percent of the average foreign exchange reserves over the period under review?
- (A) 110%
(B) 125%
(C) 96%
(D) 80%
43. Of a survey of 760 students who travel to university, 20% catch the train and 15% catch the bus. How many do not use the train or bus?
- (A) 152
(B) 114
(C) 494
(D) 266
(E) 760
44. Henry has 15 lawns mowed out of a total of 60 lawns. What percent is that?
- (A) 15
(B) 25
(C) 19
(D) 4
45. Daniel has 250 songs on his MP3 player. Ninety-five of the songs are by the same singer. What percent of Daniel's songs are by that one singer?
- (A) 26%
(B) 38%
(C) 62%
(D) 83%
46. Which percentage of students likes hamsters?
- (A) 50%
(B) 23%
(C) 18%
(D) 9%
47. Percentage of users identifying three or more benefits.
- (A) 65% of users identified three or more benefits of using Professional Standards.
(B) 79% of users identified three or more benefits of using Professional Standards.
(C) 85% of users identified three or more benefits of using Professional Standards.
(D) 72% of users identified three or more benefits of using Professional Standards.
48. If a car factory checks 320 cars and 12 of them have defects, how many out of 560 will NOT have defects?
- (A) 21
(B) 45
(C) 308
(D) 539
49. Another way of saying 55%
- (A) Less than half
(B) More than half
(C) Two-fifths
(D) A quarter
50. What is 25% of 100?
- (A) 2.5
(B) 250
(C) 25
(D) 2500
51. What percent of the vehicle gets less than 10 miles per gallon?
- (A) 38%
(B) 28%
(C) 20%
(D) 14%
52. A sports shop has 90 employees. 30% of the employees work part-time. How many part-time employees does the sports shop have?
- (A) 27 employees
(B) 30 employees
(C) 60 employees
(D) 10 employees
53. Nigeria has a literacy rate of 59.6%. South Africa has a literacy rate of 94.3%. Based off

- of the information above, which statement is most likely true?
- (A) South Africa has higher human capital than Nigeria
 - (B) South Africa has more capital goods than Nigeria.
 - (C) Nigeria has a higher GDP per capita than South Africa.
 - (D) Nigeria has more entrepreneurs than South Africa.
54. There are 1800 pupils in a school. 60% of them are Chinese, 500 pupils are Malay and the rest are Indians and other races. How many pupils are Indians and other races?
- (A) 220
 - (B) 720
 - (C) 740
 - (D) 1080
55. The city council voted on a new tax. The council has 20 members and 20% of the council members voted in favor of the new tax. How many members voted in favor of the tax?
- (A) 16 council members
 - (B) 4 council members
 - (C) 20% of the members
 - (D) 100
56. Which set of numbers is equivalent to 75%
- (A) 0.75, $\frac{3}{5}$
 - (B) 7.5, $\frac{75}{100}$
 - (C) $\frac{3}{4}$, 0.075
 - (D) $\frac{15}{20}$, 0.75
57. Maddie sold souvenirs at a concert. If she sold 40 CDs, 25 t-shirts, and 50 posters, what percent of the people bought posters?
- (A) About 25%
 - (B) About 38%
 - (C) About 43%
 - (D) About 52%
58. Read the following table carefully and answer the questions. The given tables show the total population of 6 different cities and the ratio of literate to illiterate population and the percentage of graduates out of the literate population in each city.1) Graduate population of city Q and R together is approximately what percent more or less than the graduate population of city P and T together?
- (A) 32%
 - (B) 21.5%
 - (C) 22.5%
 - (D) 20.5%
59. What is 20% of 90?
- (A) 72
 - (B) 20
 - (C) 90
 - (D) 18
60. X is 6.5% of 23
- (A) 1.4
 - (B) 1.49
 - (C) 1.495
 - (D) 1495
61. Write the shaded percent in fraction form.
- (A) $\frac{60}{100}$
 - (B) $\frac{50}{100}$
 - (C) $\frac{5}{100}$
 - (D) $\frac{6}{10}$
62. A company's revenue increased from \$500,000 to \$600,000. Calculate the percentage increase.
- (A) 20%
 - (B) 15%
 - (C) 10%
 - (D) 25%
63. Whilst off school, 5 pupils in a class of 20 stay in bed until after 12:00. What percentage of pupils get up in the morning?
- (A) 25 %
 - (B) 20 %
 - (C) 80 %
 - (D) 75 %

64. What is 85% of 150?
(A) 85
(B) 130
(C) 127.5
(D) 140
65. What's another way to describe 75%?
(A) Two-fifths
(B) Three-quarters
(C) Seven in ten
(D) None of above
66. A survey shows that 60% of students prefer soccer. If there are 50 students in total, how many prefer soccer?
(A) 20
(B) 40
(C) 10
(D) 30
67. In an election, 60% of the total votes were cast. Out of them, a candidate got 40% votes. If total voters are 5,000, find the votes received.
(A) 1000
(B) 1200
(C) 1400
(D) 1800
68. Another way of saying 32%
(A) Almost a third
(B) Almost 2 thirds
(C) Just under 50%
(D) More than half
69. The Warriors made 7 out of 15 shots. What percent of shots do the Warriors MISS out of 15? Round to the nearest whole percent.
(A) 46%
(B) 53%
(C) 94%
(D) 75%
70. If x is 80% of y , what percent of x is y ?
(A) 75%
(B) 80%
(C) 100%
(D) 125%
71. What percent of the vehicles get no more than 24 miles per gallon?
(A) 50 vehicles
(B) 50%
(C) 45 miles per gallon
(D) 51.6%
72. Php450. She used 20% of it to buy a handkerchief. She bought the handkerchief for Php 90.
(A) 20%
(B) Php90
(C) Php360
(D) Php450
73. If Mercedes ranks 199th out of the 240 cities in California what percent group are they in?
(A) Top 10%
(B) Between 10% and 50%
(C) Between 50% and 75%
(D) Above 75%
74. Find the percentage of people who like chocolate ice cream.
(A) 59.7%
(B) 168%
(C) 12%
(D) 4.17%
75. What is 14% of 80?
(A) 14
(B) 11.2
(C) 24
(D) 34
76. There are 60 girls and 90 boys in the sixth grade at a middle school. Of these students, 3 girls and 9 boys write left-handed. What percentage of the sixth graders at this middle school write left-handed?
(A) 15%

- (B) 5%
(C) 10%
(D) 8%
77. Bill makes 6.2% commission on all of his sales. Today he made \$12,000 at the Tesla dealer. Whats the total price for all the cars he sold today?
(A) \$193,548.39
(B) \$744.00
(C) \$12,744.00
(D) None of above
78. If four out of ten people vote, then in a town with two hundred thousand people, how many will vote?
(A) 80, 000
(B) 20, 000
(C) 800, 000
(D) 200, 000
79. Solve: 40% of 50.
(A) 40
(B) 24
(C) 30
(D) 20
80. There are 36 quarters in my coin collection. If my coin collection has 45% quarters, how many total coins do I have?
(A) 75%
(B) 80 %
(C) 75 coins
(D) 80 coins
81. What percentage of the days that it rained, did they forecast no rain?
(A) About 20%
(B) About 18%
(C) About 14%
(D) About 12%
82. What is the language of fractions for 10%?
(A) One in ten
(B) A quarter
(C) Half
(D) More than half
83. Which statement is true based on the information in this graph?
(A) 50% of the bag is air.
(B) 90% of the bag is air.
(C) The bag contains no air.
(D) None of above
84. Change 4% to a decimal.
(A) .04
(B) .004
(C) .4
(D) 4
85. Calculate 20% of 260.
(A) 26
(B) 13
(C) 54
(D) 52
86. What is 23% of 65?
(A) 14.95
(B) 15.95
(C) 16
(D) 13.75
87. What percent of 40 is 10?
(A) 20%
(B) 80%
(C) 10%
(D) 25%
88. What is the percent of change from 4 to 5?
(A) 25% increase
(B) 25% decrease
(C) 33% increase
(D) 33% decrease
89. A fruit basket contains 200 fruits, of which 60 are apples. What percentage of the fruits are apples?
(A) 30%

- (B) 40%
(C) 50%
(D) 60%
90. Sire spent 60% of his money to buy a new television. If the television cost \$300, how much money did he have in total before he spent it?
(A) \$3,000
(B) \$450
(C) \$600
(D) \$500
91. Mr. Johnson was running for town mayor. If 2500 voted and he received 14.4% of the votes, how many did not vote for him?
(A) 2140
(B) 360
(C) 650
(D) 20
92. Celine's garden has roses, tulips and peonies. 60% of the flowers are roses. 25% of the remaining flowers are tulips. What percentage of the flowers are peonies?
(A) 10%
(B) 20%
(C) 25%
(D) 30%
93. About how many people are in the world if nearly 3.4 billion people do not have clean toilets, and this is almost half of everyone?
(A) 3.4 billion
(B) 6.8 billion
(C) 1.7 billion
(D) 10 billion
94. Margaret's monthly income is \$1200. Of that income, 25% is used to pay her rent, and another 10% goes into savings. How much of her monthly income can Margaret use for expenses other than rent and savings?
(A) \$780
(B) \$480
(C) \$420
(D) \$350
95. Everyone at Ethan's school wore either brown or yellow for school spirit day. 74 out of the 100 students at the school wore brown. What percentage of the students wore brown?
(A) 26%
(B) 26
(C) 74
(D) 74%
96. Mrs. Patric bought a package of 15 expo markers. 20% of them were black. How many expo markers were NOT black?
(A) 12
(B) 3
(C) 7
(D) 9
97. On MS. HK's birthday party, 40% of the gathering had ice cream and the rest had the orange slush. what percent had the orange slush?
(A) 60
(B) 40%
(C) 60%
(D) 10%
98. Find the value of 20% of 7500.
(A) 1000
(B) 1500
(C) 2000
(D) 2500
99. The Gross Enrolment Ratio (GER) in institutions of higher education in India at present (2023) is about:
(A) 27.1 Percent
(B) 12 Percent
(C) 19.5 Percent
(D) 23 Percent
100. Find the percentage of students that are over 1.2 meters tall.
(A) 58.8%
(B) 32.3%
(C) 71.4%
(D) 1.83%

101. In the question, "35 is what percent of 40?"
What is the 40?
(A) Part
(B) Whole
(C) Percent
(D) Nothing
102. A class of sixty voted for class president. 30% voted for Brad and 70% voted for Jane. How many votes did the winner get?
(A) 18
(B) 30
(C) 42
(D) 60
103. Percentage of loss on SP =
(A) $\frac{SP-CP}{CP} \times 100 \%$
(B) $\frac{CP-SP}{CP} \times 100 \%$
(C) $\frac{SP-CP}{SP} \times 100 \%$
(D) $\frac{CP-SP}{SP} \times 100 \%$
104. In what year did Mineral have the largest percentage of exports?
(A) 2002
(B) 2006
(C) 2011
(D) 2018
105. Michael sold 24% of the cookies he baked. He had 190 cookies left. He baked ____ cookies.
(A) 300
(B) 275
(C) 250
(D) 200
106. About what percent of American households have fiber connections to their homes?
(A) 5%
(B) 15%
(C) 60%
(D) 90%
107. Sally's soccer team played 25 games and won 17 of them. What percent did the team win?
(A) 32%
(B) 68%
(C) 17%
(D) 25%
108. Stella's English class is 100 minutes long. She spent 15 minutes of class reading. What percent of class did she spend not reading?
(A) 15 minutes
(B) 85 minutes
(C) 15%
(D) 85%
109. What was the percentage increase in price of commodity B from January to April?
(A) 15
(B) 20
(C) 17
(D) 10
110. Gio scored 60% of the soccer goals scored by his soccer team during one season. If his team scored a total of 35 goals, how many did Gio score?
(A) 30
(B) 21
(C) 18
(D) 15
111. The ratio used to find percent is ____
(A) Part/whole = %/100
(B) Part/whole = 100 / %
(C) Whole/part = % / 100
(D) None of above
112. What is the percentage of female workers in the company 'w' out of the total number of females in all given companies?
(A) 17.24%
(B) 12.18%
(C) 15.40%
(D) 14.81%

113. Find the percentage of the sales of Jazz sold in January. This question was discussed last week.
- (A) 0.01%
 - (B) 36%
 - (C) 10%
 - (D) $1/10\%$
114. Three candidates contested an election and received 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?
- (A) 57%
 - (B) 60%
 - (C) 87%
 - (D) 90%
115. A florist is told that 40% of the 350 flowers ordered must be red roses. How many red roses must be in the order?
- (A) 390 roses
 - (B) 100 roses
 - (C) 140 roses
 - (D) 240 roses
116. Ben ran for president of his class. If there are 410 students and he received 72% of the vote, how many students voted for Ben?
- (A) 212 students
 - (B) 810 students
 - (C) 295 students
 - (D) 410 students
117. What is the approximate overall percentage of marks obtained by Umesh in all the subjects together?
- (A) 75
 - (B) 71
 - (C) 79
 - (D) 82
118. Twenty-four percent of the 25 swim team members are new on the team. How many members are new?
- (A) 6
 - (B) 8
 - (C) 10
 - (D) 12
119. What is 150% of \$20?
- (A) \$20
 - (B) \$30
 - (C) \$40
 - (D) \$150
120. What is 37% of 600?
- (A) 222
 - (B) 370
 - (C) 60
 - (D) 110
121. The ice cream shop sold 8 vanilla cones, 15 strawberry cones, and 25 chocolate cones in one evening. What percent of the cones sold were strawberry?
- (A) 24.25%-doing back flips
 - (B) 27.5%-using blue paint
 - (C) 28.95%-eating Cheetos
 - (D) 31.25%-using pink paint
122. Kate paid 76% of her \$1400 loan. How much has she paid already?
- (A) \$1064
 - (B) \$1046
 - (C) \$336
 - (D) \$363
123. Joan scored 35 out of 60 in a maths test. What percentage is this?
- (A) 60%
 - (B) 55%
 - (C) 35%
 - (D) 58.3%
124. There are 50 cars in a car park. 40% of the cars are Fords. Of the Fords, 6 were white. There were three times as many cars that were neither white nor Ford as there were white Fords. The number of cars that were Fords but not white is ____

- (A) 26
(B) 6
(C) 12
(D) 14
125. What characteristic of a Green School in which it reduces absenteeism by 15%?
(A) It reduces water usage
(B) It improves daily attendance
(C) It improves equity
(D) It creates green jobs
126. Determine if you are finding the part, percent, or whole. 12 is 50% of what number?
(A) Part
(B) Percent
(C) Whole
(D) None of above
127. What is 90% of 50?
(A) 9
(B) 18
(C) 40
(D) 45
128. According to the graph, what percent of people own fish?
(A) 6%
(B) 30%
(C) 55%
(D) None of above
129. Last year, 2,376 people attended a summer music festival. This year, attendance was 2,950. What was the percent of change in attendance to the nearest whole percent?
(A) Increase 24%
(B) Increase 19%
(C) Decrease 24%
(D) Decrease 19%
130. If A's salary is 20% less than B's salary, by how much percent is B's salary more than A's?
(A) 26%
(B) 30%
(C) 40%
(D) 25%
131. The price of a product decreased from \$80 to \$64. Calculate the percentage decrease.
(A) 30%
(B) 25%
(C) 15%
(D) 20%
132. The percentage errors in the measurement of mass and speed are 2% and 3% respectively. How much will be the maximum error in the estimation of the kinetic energy obtained by measuring mass and speed
(A) 11 %
(B) 8%
(C) 5%
(D) 1%
133. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was:
(A) 2700
(B) 2900
(C) 3100
(D) 3000
134. You are assigned 32 math questions for homework. You complete 87.5% of these before dinner. How many questions do you have left to do after dinner?
(A) 7
(B) 4
(C) 28
(D) 20
135. The Teaneck Zoo has 130 different exhibits. Of those 130 exhibits, 30% of them contain birds. How many exhibits contain birds?
(A) 49
(B) 39
(C) 60
(D) 25

136. In a bag of gumballs, 20% of the gumballs are blue. There are 10 blue gumballs in the bag. How many total gumballs are in the bag?
- (A) 20
(B) 40
(C) 50
(D) 200
137. What is the profit percent if a shopkeeper buys a football for \$12 and sells it for \$15?
- (A) 80%
(B) 25%
(C) 20%
(D) 50%
138. If x is 75 percent of 360, what is x ?
- (A) 298.50
(B) 297.50
(C) 279.50
(D) 270
139. Collin earned \$4,000 from working on a project. If that represented 80% of his total income, what was his total income?
- (A) \$2,000
(B) \$4,000
(C) \$4,875
(D) \$5,000
140. On the beach boardwalk, there are 20 different places to get food. Twenty percent of them are ice cream shops. How many ice cream shops are there?
- (A) 100
(B) .04
(C) 40
(D) 4
141. If the tuition fee in a certain school increased by 12% and last year's tuition fee was P35,000, what is the new tuition fee?
- (A) P4,200
(B) P42,000
(C) P38,500
(D) P39,200
142. The total number of students in the University A is what per cent of the total number of students in University F?
- (A) 55%
(B) 67%
(C) 60%
(D) 48%
143. Thirty-five percent of the students in Mr. Remington's class are left-handed. If 7 students are left-handed, how many students are right-handed?
- (A) 20
(B) 13
(C) 11
(D) 18
144. What percent of students have a height between 58 inches and 60 inches?
- (A) 25%
(B) 50%
(C) 75%
(D) 100%
145. What is 90% of 60?
- (A) 54
(B) 6
(C) 0.6
(D) 48
146. A class has 30 students, and 60% of them are girls. How many boys are in the class?
- (A) 10
(B) 12
(C) 15
(D) 18
147. In Mr. Horn's math class, final grades are based 80% on tests, 15% on homework and 5% participation points. If Lea holds a 75% test average, a 0% homework average and has 100% of her participation points, what is Lea's current grade?
- (A) 65%
(B) 85%
(C) 60%
(D) 70%

148. Which percent is equal to the decimal 0.013?
(A) 13%
(B) .13%
(C) 130%
(D) 1.3%
149. Thirty-six members of the middle school choir, or 30%, participated in the regional contest, as shown in the model. How many total students are there in the choir?
(A) 115
(B) 120
(C) 130
(D) 136
150. If section N is 15% and section O is 35%, how much larger is section O compared to section N?
(A) 30%
(B) 25%
(C) 20%
(D) 10%
151. In the United States, 3 out of 5 cars are black. What percent of the cars made in the United States are black?
(A) 30%
(B) 50%
(C) 15%
(D) 60%
152. What is the PERCENTAGE discount?
(A) 71%
(B) 72%
(C) 73%
(D) 74%
153. Cookies have increased in price by 6% in recent months. If today's price is approximately \$2.30, how much was the original price of cookies before the price increased?
(A) \$2.17
(B) \$2.44
(C) \$0.06
(D) \$1.38
154. If 34% of Y10 students study science, approximately what fraction could we describe this as?
(A) $\frac{1}{2}$
(B) $\frac{1}{3}$
(C) $\frac{1}{4}$
(D) $\frac{2}{3}$
155. What is the relative frequency for the class of students that spent 31-60 minutes studying for the exam?
(A) 33%
(B) 18%
(C) 9%
(D) 25%
156. Morgan has a goal to run 50 miles per month. If he has already achieved 70% of his goal this month, how many miles has he already run this month?
(A) 35
(B) 75
(C) 64
(D) 30
157. If you got half the questions on your test wrong what percentage did you get correct?
(A) 100
(B) 75
(C) 50
(D) 25
158. What is 43% of 300?
(A) 127
(B) 129
(C) 131
(D) None of above
159. Among the pupils who are enrolled in a class, only 30% do not have access to the internet. If there were 50 pupils, how many have no internet access?
(A) 3
(B) 5
(C) 10
(D) 15

- 160.** In a school, 25 % of the teachers teach basic math. If there are 50 basic math teachers, how many teachers are there in the school?
- (A) 150 teachers
(B) 5 teachers
(C) 50 teachers
(D) 200 teachers
- 161.** There are 36 quarters in my coin collection. If my coin collection has 45% quarters, how many total coins do I have? Use a tape diagram to solve.
- (A) 75%
(B) 80 %
(C) 75 coins
(D) 80 coins
- 162.** There are 35 competitors in a marathon. Sixty percent of these finished the race in under four hours. How many competitors finished the race in under four hours?
- (A) 7 competitors
(B) 21 competitors
(C) 58 competitors
(D) 14 competitors
- 163.** What is 10% of 730?
- (A) 73
(B) 7300
(C) 350
(D) 735
- 164.** What percentage of students scored a 39 or higher?
- (A) None
(B) 25%
(C) 50%
(D) 75%
- 165.** A man spends 80% of his income. If his income increases by 25% and his expenditure increases by 20%, what is the percentage increase in his savings?
- (A) 30%
(B) 35%
(C) 40%
(D) 45%
- 166.** What percentage is 240 of 1200?
- (A) 10
(B) 20
(C) 30
(D) 40
- 167.** In 2008 approximately what percent of the world's population lived in Asia?
- (A) 50%
(B) 60%
(C) 75%
(D) 90%
- 168.** The seventh grade class needs to earn money for a trip to the amusement park. Of the 160 seventh-grade students, 60% participate in the fundraiser. How many students participate in the fundraiser?
- (A) About 267 Students
(B) 16 Students
(C) 32 Students
(D) 96 Students
- 169.** Denise made an extra \$245.00 for selling furniture. The extra \$245.00 was 7% of the total value of the furniture she sold. What was the total value of the furniture Denise sold?
- (A) \$3,500.00
(B) \$171.50
(C) \$350.00
(D) \$1,715.00
- 170.** A cell phone company dropped the prices on their phones by 9%. Which expression shows the NEW PRICE of the phone, p?
- (A) $P - 0.09p$
(B) $P - 1.09p$
(C) $P \times 0.09p$
(D) $P - 0.09$
- 171.** There are 100 apples consisting of 35 red apples and 65 green apples. what percentage of the apples are green apple?

- (A) 100%
(B) 65%
(C) 35%
(D) 30%
172. Select the equation that matches: 28% of 63 is what?
(A) $.28 \times 63 = p$
(B) $.28 \times p = 63$
(C) $63 \times p = .28$
(D) None of above
173. The population of a city increased from 500,000 to 600,000. Calculate the percentage increase.
(A) 10%
(B) 15%
(C) 20%
(D) 25%
174. What percentage of the whole week does Pirkandu spend in office, if his office hours are 9 am to 5 pm from Monday to Friday?
(A) 23.8%
(B) 28%
(C) 20.5%
(D) 25.8%
175. Out of 21 kids in the class, 5 of them play on the soccer team. What percentage of kids are on the soccer team?
(A) 21%
(B) 5%
(C) 24%
(D) 76%
176. Joey has 3 out of 20 coins in his collection. What percent does he have?
(A) 7%
(B) 15%
(C) 20%
(D) 30%
177. Pham is saving money to buy new headphones. The headphones cost \$200, but she has saved only 45% so far. How much more does Pham need to save to buy the headphones?
(A) \$90
(B) \$100
(C) \$110
(D) \$145
178. To calculate 320% of 45, which arithmetic should you do?
(A) 320×45
(B) 32×45
(C) 3.2×45
(D) 0.32×45
179. A piece of land purchased for \$100,000 and sold for \$125,000, this is a percentage ____
(A) Percentage loss of 25%
(B) Percentage Profit of 25%
(C) Percentage loss of 20%
(D) Percentage profit of 20%
180. How many students scored more than 80%?
(A) 10
(B) 13
(C) 7
(D) 15
181. What's another way to describe 40%?
(A) Slightly over a fifth
(B) Two-fifths
(C) Just under a half
(D) None of above
182. Find the percent increase. Round to the nearest percent. From \$5 to \$8
(A) 40%
(B) 60%
(C) 55%
(D) 65%

183. What is the following question asking you to find? "64% of what is 95?"
- (A) Percent
 - (B) Part
 - (C) Whole
 - (D) Nothing
184. Joe cut three acres of grass at the Smith Farm, which is 15% of the property. How many acres are on the Smith Farm?
- (A) 15 acres
 - (B) 20 acres
 - (C) 30 acres
 - (D) 45 acres
185. Find 60% of 200
- (A) 20
 - (B) 12
 - (C) 1200
 - (D) 120
186. In which year did School B have a higher percentage of children with spelling problems?
- (A) 2005
 - (B) 2015
 - (C) The percentage was the same
 - (D) The data is not available
187. Martin's class has 28 students in it. 25% of those students are home sick today. How many students are home sick?
- (A) 4 students
 - (B) 7 students
 - (C) 11 students
 - (D) 13 students
188. Which of the following is an example of percent decrease?
- (A) A population rising by 2% each year
 - (B) A salary increasing from 500 to 550
 - (C) A savings account earning 4% interest annually
 - (D) A car's value dropping from 10,000 to 8,000
189. Lin's family has completed 70% of a trip. They have traveled 35 miles. How far is the trip?
- (A) 24.5 miles
 - (B) 50 miles
 - (C) 59.5 miles
 - (D) 200 miles
190. In a survey, 10% of the people said they live in a city. If 60 people said they live in a city, how many people were surveyed?
- (A) 15 people
 - (B) 25 people
 - (C) 240 people
 - (D) 600 people
191. Allie's Bakery has 36 parking spots in front of the store. Eleven of the parking spots are currently empty. What percent of the parking spaces, rounded to the nearest percent, are filled with customer cars?
- (A) 23%
 - (B) 31%
 - (C) 69%
 - (D) 77%
192. If the US contributed 20% of the overall budget, what fraction of the budget did they contribute?
- (A) $\frac{1}{2}$
 - (B) $\frac{1}{4}$
 - (C) $\frac{1}{5}$
 - (D) $\frac{1}{10}$
193. Another way of saying just over 3 quarters?
- (A) 77%
 - (B) 85%
 - (C) 90%
 - (D) 40%
194. Last year, there were 380 students at Woodland Middle School. This year, the student population will increase by 5%. what will be the school's increased student population?
- (A) 399 students

- (B) 19 students
(C) 456 students
(D) None of above
- 195.** On Monday, a restaurant served 54 diet sodas. This was 75% of the sodas sold that day. How many sodas did the restaurant serve on Monday?
(A) 129
(B) 94
(C) 79
(D) 72
- 196.** Juan made \$40 his first week of mowing lawns. The second week, his wages increased by 20%. How much did he make the second week?
(A) 8
(B) 32
(C) 36
(D) 48
- 197.** A number is increased from 120 to 150. Find the percentage increase.
(A) 20%
(B) 25%
(C) 30%
(D) 35%
- 198.** What is 17% of 80?
(A) 17
(B) 13.6
(C) 8
(D) 12
- 199.** A car's value depreciated from \$20,000 to \$16,000. Calculate the percentage decrease.
(A) 25%
(B) 15%
(C) 20%
(D) 30%
- 200.** What is each percent of change? Round to the nearest whole percent if necessary.
Is the percent of change an increase or decrease? \$300 to \$200
(A) 100%; decrease
(B) 50%; decrease
(C) 33%; decrease
(D) 33%; increase
- 201.** What was the approximate percentage decrease in the price of commodity A from March to April?
(A) 1
(B) 9
(C) 14
(D) 12
- 202.** John is having 500 marbles, 20% of his marbles are red, how many red marbles does John have?
(A) 250
(B) 350
(C) 100
(D) 50
- 203.** A mixture contains 8 L of water and 42 L of milk. What is the percentage of water in the mixture?
(A) 19.0%
(B) 16%
(C) 80.1%
(D) Not listed
- 204.** Which percentage is the same as one half?
(A) 5%
(B) 20%
(C) 0.5%
(D) 50%
- 205.** What does the w stand for in the percent proportion?
(A) Percent
(B) Part
(C) Whole
(D) None of above

206. The number of students enrolled at a high school has increased from 398 to 503. Which is the best estimate of the percent of increase in enrollment?
- (A) 27%
(B) 20%
(C) 26%
(D) 25%
207. A team set a goal of winning 70 percent of the 40 games it would play. Of the first 10 games the team played, it won only 4. How many of the REMAINING games must the team win to reach its original goal?
- (A) 19
(B) 23
(C) 24
(D) 28
208. Jarielys spent 80 minutes outside during the snowstorm. Amalia spent 145% as much time as Jarielys outside in the storm. How long did Amalia spend outside in the storm?
- (A) 125 minutes
(B) 116 minutes
(C) 55 minutes
(D) 225 minutes
209. What percent of the students sent between 40 and 59 text messages?
- (A) 45%
(B) 25 text messages
(C) 45 text messages
(D) 25%
210. Emma and her friends ate 12 of the 16 apples that she purchased. What percent of apples did they eat?
- (A) 7.5 %
(B) 8 %
(C) 75 %
(D) 80 %
211. Percentage
- (A) =
- (B) \$
(C) %
(D) :
212. What would you do if you wanted to calculate 50% of something?
- (A) Divide by 4
(B) Divide by 5
(C) Divide by 2
(D) Multiply by 5
(E) Multiply by 50
213. A shop sells 300 bikes. This was a 50% increase on last year. How many were sold last year?
- (A) 250
(B) 200
(C) 150
(D) 50
214. How do you set up percent proportions?
- (A) $(\text{part/whole}) = (\%/100)$
(B) $(\%/part) = (100/whole)$
(C) $(\text{part/part}) = (\text{whole/whole})$
(D) $(\text{whole/part}) = (\%/100)$
215. The decimal for 25% is ____
- (A) 2.5
(B) .25
(C) .025
(D) 25
216. We use % symbol for ____
- (A) Fractions
(B) Decimals
(C) Percentage
(D) Multiply
217. According to Resource 2 (Statistics Poster) what percentage of parents said their children benefit from using the internet.
- (A) 45%
(B) 80%
(C) 60%
(D) 90%

- 218.** What does it mean if student Pete got a 60% percentile rank in class?
- (A) He got 60% of the test items correctly
 - (B) He scored better than 60% of the class
 - (C) He scored less than 60% of the class
 - (D) He got 40% of the test wrongly
- 219.** What is 80% of 90?
- (A) 112.5
 - (B) 98
 - (C) .008
 - (D) 72
- 220.** Percent is always out of
- (A) 10
 - (B) 100
 - (C) 1000
 - (D) 10,000
- 221.** There are 12 girls and 8 boys in a class. Of these students, 3 girls and 2 boys write left-handed. What percentage of the class write left-handed?
- (A) 5%
 - (B) 25%
 - (C) 40%
 - (D) 15%
- 222.** Write the percent equation: What is 80% of 12?
- (A) $A = 0.8(12)$
 - (B) $12 = 0.8 w$
 - (C) $80 = 12 p$
 - (D) $A = 12/0.8$
- 223.** When calculating Part to Whole
- (A) The Part goes in the denominator
 - (B) Change the decimal to a percent and multiply
 - (C) Use the No-No Rule
 - (D) Set it up as a proportion equal to x over 100
- 224.** If section J is twice the size of section K, and K is 10%, what percentage does J represent?
- (A) 30%
 - (B) 15%
 - (C) 25%
 - (D) 20%
- 225.** Annie shucks corn to help her father. In one day, Annie was able to shuck 20 bushels of corn that her father wanted to sell. This is 25% of the total. How many bushels of corn did they have?
- (A) 50
 - (B) 60
 - (C) 70
 - (D) 80
- 226.** What is 120% of \$200
- (A) 220%
 - (B) \$240
 - (C) \$120
 - (D) \$60
- 227.** Jake takes two tests in a week. On the first test, he got 31 out of 50 questions correct. On the second test, he got 28 out of 40 questions correct. On which test did he receive a higher score?
- (A) Test 1
 - (B) Test 2
- 228.** An airplane had 400 seats. 80% of the seats were occupied. How many seats were occupied?
- (A) 300 seats
 - (B) 200 seats
 - (C) 320 seats
 - (D) 180 seats
- 229.** When converting from percentage to a fraction always divide by 100 (initially)
- (A) True
 - (B) False

230. A swimming club has a total numbers of 96 members. There are 48 girls in the club. What is the percentage of the number of girls in the club?
- (A) 50 %
(B) 5 %
(C) $1/2$ %
(D) 0.5 %
231. If the Rockets won 16 out of 20 games played. What percentage did the Rockets win?
- (A) 20%
(B) 80%
(C) 16%
(D) 75%
232. What is 20% of 110?
- (A) 1.10
(B) 11
(C) 20
(D) 22
233. Emma's number of friends on Facebook grew by 5% in the last month. If she has 575 friends now, how many did she have last month?
- (A) 548
(B) 549
(C) 550
(D) None of above
234. The "whole" in the percent proportion can typically be found with the word, " ____".
- (A) Of
(B) Is
235. Calculate 25% of 80
- (A) 20
(B) 80
(C) 48
(D) 95
236. Mary's income dropped from \$50,000 annually to \$40,000 annually. What was the percent decrease in her income? *
- (A) 10%
(B) 15%
(C) 20%
(D) 25%
237. What is the following question asking you to find?"What percent of 146 is 83?"
- (A) Percent
(B) Part
(C) Whole
(D) Nothing
238. What is 17% of 78?
- (A) 13.6
(B) 13.26
(C) 14
(D) 14.12
239. Splash has put a large sale, i chose a dress which was 35% off, what percent of cost did i pay?
- (A) 35%
(B) 65
(C) 65%
(D) 100
240. What percentage of Group A earns between \$1100 and \$1400?
- (A) 25%
(B) 50%
(C) 75%
(D) 100%
241. What is 30% as a decimal?
- (A) 0.30
(B) 0.03
242. Sam received \$125 for his birthday. He spent \$85 at the store and put the rest in the bank. What percent of his birthday money did he spend at the store?
- (A) 85%
(B) 32%
(C) 68%
(D) 125%

- 243.** Katherine was making treats for a bake sale. She made a total of 50 treats to donate. 20 of these treats were cookies. What percent of the treats were cookies?
- (A) 4
(B) 2.5
(C) 40
(D) 25
- 244.** Angela made 90% of the 50 free throws she attempted. How many free throws did Angela make?
- (A) 10
(B) 27
(C) 41
(D) 45
- 245.** Find the equation for: What number is 6 percent of 5?
- (A) $n = 6\% \times 5$
(B) $n = 6p \times 5$
(C) $n \times 6\% = 5$
(D) $n \times 5 = 6\%$
(E) $p = 6 \times 5$
- 246.** Tarik turns in his third research report. His teacher says that 20% of his reports for the year are done. How many research reports will Tarik complete during the school year?
- (A) 0.6 reports
(B) 12 reports
(C) 15 reports
(D) 18 reports
- 247.** In a school 70% of the students are girls. The number of boys are 510. Then the total number of students in the school is
- (A) 850
(B) 1700
(C) 1830
(D) 1900
- 248.** The percentage of people from 7 to 14 years old increased ____ about 10% in 1989.
- (A) To
(B) By
- 249.** Lacey's class just held a class election. 60% of the 25 students in the class voted. How many students voted?
- (A) 19 students
(B) 35 students
(C) 15 students
(D) 6 students
- 250.** It is the number that represents the whole or the entire amount.
- (A) Percent
(B) Rate
(C) Base
(D) None of the above
- 251.** What is 25% of 5000 gms of sugar
- (A) 1000 gms
(B) 2500 gms
(C) 1250 gms
(D) 750 gms
- 252.** Out of 50 people, 16 said that their favorite flavor of ice cream is chocolate. What percent of people chose chocolate?
- (A) 16%
(B) 32%
(C) 50%
(D) 25%
- 253.** The percentage of the number of students getting at least 60% marks in Chemistry over those getting at least 40% marks in aggregate, is approximately
- (A) 21%
(B) 27%
(C) 29%
(D) 31%
- 254.** Bruno was given \$2000 when he turned 3 years old. His parents invested it at a 2% interest rate compounded annually. No deposits or withdrawals were made. Which expression can be used to determine how much money Bruno had in the account when he turned 16?
- (A) $2000(1+0.02)^{13}$

- (B) $2000(1-0.02)^{13}$
(C) $2000(1+0.02)^{16}$
(D) $2000(1-0.02)^{16}$
- 255.** What is 42% of 65?
(A) 23.7
(B) 25.3
(C) 27.3
(D) None of above
- 256.** A bakery sells taro, pineapple and apple pies. 65% of the pies are taro pies. 40% of the remaining pies are pineapple pies. What percentage of the whole pies are pineapple pies?
(A) 35%
(B) 24%
(C) 18%
(D) 14%
- 257.** What percentage of the houses are semi-detached?
(A) 60%
(B) 40%
(C) 33%
(D) None of above
- 258.** The number of girls participating in the rally from School E is approximately what percent of the number of boys participating in the rally from the same school?
(A) 81
(B) 106
(C) 122
(D) 98
- 259.** Brea plays softball. If she hits the ball 35% of the times she bats, how many times will Brea hit the ball if she bats 20 times?
(A) 4
(B) 7
(C) 15
(D) 6
- 260.** In 2015, which problem had the lowest percentage in School B?A) HandwritingB) Reading abilityC) Following instructionsD) Listening skills
(A) Reading ability
(B) Following instructions
(C) Handwriting
(D) Listening skills
- 261.** Gary read 34 pages of a 340-page book. What percent did he read?
(A) 34%
(B) 15%
(C) 10%
(D) 25%
- 262.** What is the following question asking you to find?"18 is what percent of 98?"
(A) Percent
(B) Part
(C) Whole
(D) Nothing
- 263.** Identify the percent of change as an increase or a decrease. Then find the percent of change. Round to the nearest tenth of a percent if necessary.Original: 196New: 174
(A) 11% decrease
(B) 11.2% decrease
(C) 12.6% increase
(D) 13% increase
- 264.** What percent of people spent between \$40 and \$100 on groceries?
(A) 25
(B) 50
(C) 75
(D) 100
- 265.** There are 20 questions in a test and you get 75% correct.How many questions do you get right?
(A) 15
(B) 3
(C) 12
(D) 10

266. In the statement 24% of 250 is 60, which is the base?
(A) 0.24
(B) 24%
(C) 60
(D) 250
267. Tickets to Disney World are \$100. The price is going to increase on March 1 into \$120. The percent change is ____
(A) 25%
(B) 18%
(C) 20%
(D) 50%
268. The Miller family received their bill for \$49.00 from their waiter. Mom wants to leave a 15% tip and Dad wants to leave a 20% tip. How much more money total does Dad want to leave than Mom?
(A) \$2.45
(B) \$2.65
(C) \$4.80
(D) \$9.80
269. Write an expression: an increase of 10%
(A) $X + 10$
(B) $X + 10x$
(C) $X + .10x$
(D) $10 + x$
270. Solve using the percent proportion: 26 is 5% of what number?
(A) 1.3
(B) 2.5
(C) 25.95
(D) 520
271. In Will's garden, 71 out of 200 plants have developed seeds. What percent is that?
(A) 20%
(B) 25.5%
(C) 35.5%
(D) 70%
272. Ms. Scott receives a basket of apples at her door every Friday morning. Last Friday, there were 5 apples in the basket. This Friday, there were 8 apples in the basket. What is the percent of increase in the number of apples in the basket?
(A) 38%
(B) 63%
(C) 60%
(D) 167%
273. An item in the store is being discounted by 8%. This is the same as taking ____ % of the original cost.
(A) 8
(B) 108
(C) 92
(D) 99.2
(E) 0.08
274. What percent of the graph is red?
(A) 50
(B) 25
(C) 75
(D) 360
275. My class size has increased by 35% this year. I had 20 students last year, how many do I have now?
(A) 23
(B) 25
(C) 27
(D) 29
276. Find the new amount: 52 workers after 25% increase
(A) 65 workers
(B) 13 workers
(C) 39 workers
(D) 77 workers
277. Joe and Pete surveyed a group of students and found that 20% like Takis. If 60 students like Takis, how many did they survey?
(A) 300

- (B) 240
(C) 60
(D) 600
278. A television regularly priced at \$3,200 is on sale for \$2,400. If Riley bought the tv, what was the percent off?
(A) 25% off
(B) 40% off
(C) 50% off
(D) 75% off
279. Only 7% of the 100 kids in junior high will be placed into the accelerated program in high school. How many junior high students will be placed into this program?
(A) 14
(B) 9
(C) 7
(D) 3
280. What is the combined percentage of sections P and Q if P is 20% and Q is 30%?
(A) 70%
(B) 40%
(C) 60%
(D) 50%
281. Compare: 0.025 ____ 2.5%
(A) >
(B) <
(C) =
(D) None of above
282. Of the 60 books on a bookshelf, 24 are non-fiction. What percent of the books are nonfiction?
(A) 25%
(B) 40%
(C) 250%
(D) .40%
283. In an election out of 60000 eligible voters, 36000 cast their votes. What is the percentage of people not casting their votes?
(A) 40
(B) 36.67
(C) 60
(D) 29.24
284. Sue answers 42 out of 60 questions correctly. What percent of her answers are correct?
(A) 14%
(B) 42%
(C) 56%
(D) 70%
285. Of the 20 people in class, 12 are male. What percent are male?
(A) 12%
(B) 60%
(C) 30%
(D) None of above
286. Alexia wanted to find 45% of the number 82. She knew that 45% is equivalent to 0.45. She also knew that 45% of a number would be less than half of the original number. Which answer correctly shows 45% of 82?
(A) 369
(B) 36.9
(C) 7.38
(D) 73.8
287. There are 4 girls in a class of 16 students. What percent of the class is boys?
(A) 12%
(B) 75%
(C) 50%
(D) 90%
288. There are approximately 15000 red cabs in Hong Kong. This represents approximately 80% of the total taxis. Find the total number of taxis in Hong Kong
(A) 18000
(B) 18750
(C) 18650
(D) 20105

- 289.** Daniel downloaded 375 songs. If 24% of the songs were free, then how many songs did Daniel download for free?
- (A) 64 free songs
 - (B) 6 free songs
 - (C) 1563 free songs
 - (D) 90 free songs
- 290.** What is 28% of 200?
- (A) 48
 - (B) 52
 - (C) 54
 - (D) 56
- 291.** At a sport club 40% prefer football, 30% basketball and the rest volleyball. 300 children attend this sport club. Find the number of those who prefer volleyball.
- (A) 70
 - (B) 80
 - (C) 90
 - (D) 100
- 292.** What is the percent of change from 35 to 63?
- (A) 80% decrease
 - (B) 75% decrease
 - (C) 80% increase
 - (D) 75% increase
- 293.** Click on the equivalent percentage of $\frac{1}{4}$.
- (A) 4%
 - (B) 14%
 - (C) 50%
 - (D) 25%
- 294.** A survey shows that 40% of students prefer soccer over basketball. If there are 200 students, how many prefer soccer?
- (A) 80
 - (B) 60
 - (C) 40
 - (D) 100
- 295.** If segment I increases by 10%, what will its new percentage be?
- (A) 100% of the original percentage
 - (B) 120% of the original percentage
 - (C) 90% of the original percentage
 - (D) 110% of the original percentage
- 296.** Which is larger, $\frac{2}{5}$ or 52%?
- (A) 52%
 - (B) $\frac{2}{5}$
 - (C) They are equal
 - (D) Neither
- 297.** At a soccer game, your team scored 8 goals total during regular play, 2 of those goals were on penalty kicks. What percent of all goals were scored on penalty kicks?
- (A) 25%
 - (B) 75%
 - (C) 6%
 - (D) 20%
- 298.** The Rangers are projected to win 70% of their games this year. If they play 190 games, how many games should they win?
- (A) 150
 - (B) 133
 - (C) 120
 - (D) 183
- 299.** Solve using the percent proportion: What number is 20% of 102?
- (A) 204
 - (B) 122.4
 - (C) 20.4
 - (D) 20
- 300.** In a computer class, students take a typing test to determine their speed. Forty percent of the students were able to type at which speed interval?
- (A) 0-14
 - (B) 15-29
 - (C) 30-44
 - (D) 45-59

- 301.** Percent/percentage
- (A) Mile/yard/feet/inch; gallon/quart/pint/cup/fluid ounce; ton/pound/ounce
 - (B) -a change in the form of measurement (different units) without a change in size or amount
 - (C) Kilometer/meter/centimeter/millimeter; liter/milliliter/kilogram/gram/milligram
 - (D) A ratio that compares a number to 100; per hundred
- 302.** In hopes of encouraging healthier snacks at school, Sophia brought in a tray of carrot sticks and apple slices to share. The tray had a total of 70 snacks, of which 10% were carrot sticks. How many carrot sticks did Sophia bring?
- (A) 70
 - (B) 7
 - (C) 10
 - (D) 700
- 303.** Write an equation to solve. 60% of 12 is what number?
- (A) $12 \times \text{Unknown} = 0.60$
 - (B) $\text{Unknown} \times 0.60 = 12$
 - (C) $0.60 \times 12 = \text{Unknown}$
 - (D) None of the above
- 304.** Which section would you identify as the median if the sections are 10%, 20%, 30%, and 40%?
- (A) 15%
 - (B) 35%
 - (C) 25%
 - (D) 50%
- 305.** There are 75 students in the school band. 45 students play woodwind instruments. What percent of students play woodwinds?
- (A) 35%
 - (B) 60%
 - (C) 55%
 - (D) 70%
- 306.** Which among the food in the graph had the most percent of sugar content?
- (A) Ketchup
 - (B) Cracker
 - (C) Chocolate bar
 - (D) Soda
- 307.** The population of a City increased from 1,75,000 to 2,62,500 in a decade. What is the average percent increase of population per year?
- (A) 4%
 - (B) 6%
 - (C) 5%
 - (D) 50%
- 308.** What PERCENT of 186 is 93?
- (A) .5
 - (B) 200%
 - (C) .2
 - (D) 50%
- 309.** Which figure means "almost a quarter"?
- (A) 24%
 - (B) 25%
 - (C) 20%
 - (D) None of above
- 310.** Ameer purchased a car for \$10,000, which he later sold for \$15,800. What is the percentage of Ameer's profit?
- (A) 58%
 - (B) 37%
 - (C) 158%
 - (D) 63%
- 311.** There are 42 teachers that work in a school. On Friday, 29 teachers were present. Approximately what percent of the teachers showed up for work?
- (A) 50%
 - (B) 69%
 - (C) 55%
 - (D) 80%

- 312.** Which is bigger: 25% of 200 OR 20 % of 250
(A) 25% of 200
(B) 20% of 250
(C) They are the same
(D) None of above
- 313.** Select the equation that matches: For a company picnic, Cindy ordered a box of fresh-baked gingerbread cookies and sugar cookies. The box included a total of 60 cookies, and 75% of them were gingerbread. How many gingerbread cookies did Cindy get?
(A) $75 \times w = 60$
(B) $.75 \times w = 60$
(C) $.75 \times 60 = w$
(D) $75 \times 60 = w$
- 314.** In a class of 50 students, 60% are boys. How many girls are there?
(A) 15
(B) 18
(C) 20
(D) 25
- 315.** In a bundle of 30 fruits, 6 are apples and the rest are oranges. What percent of the bundle is composed of apples?
(A) 47%
(B) 47.75%
(C) 20%
(D) 40.75%
- 316.** If there are 80 dogs at the animal shelter and 30% of them are puppies, how many of the dogs are puppies?
(A) 30
(B) 2.4
(C) 24
(D) 56
- 317.** Bill is in a class of 15 boys and 35 girls. What percent of the class are girls?
(A) 30%
(B) 20
(C) 70%
(D) 35
- 318.** What percent of 60 is 12?
(A) 5
(B) 20
(C) 15
(D) 7.2
- 319.** What percent of the figure is shaded?
(A) 53%
(B) 60%
(C) 63%
(D) 37%
- 320.** Noah cut three acres of grass at the Smith Farm, which is 15% of the entire property. How many acres in all are on the Smith Farm?
(A) 15 acres
(B) 20 acres
(C) 30 acres
(D) 45 acres
- 321.** Which sentence below from the essay by Dale Stephens is related to the information in this chart?
(A) This is the time of year when high school seniors across the country are checking the mail obsessively for college acceptance letters.
(B) — more than 44 percent of college graduates under 25 who were area studies majors were unemployed in 2009.
- 322.** If 25% of students get the car, 30% get the bus, 15% come by bike, how many students walk.
(A) 25%
(B) 85%
(C) 31%
(D) 30%
- 323.** Out of 30 students in a class, 30% are boys. How many girls are there in the class?
(A) 14
(B) 9
(C) 21
(D) 25

324. Eric makes 25 cookies. 7 cookies are oatmeal raisin. What percent are oatmeal raisin?
- (A) 72%
 - (B) 7%
 - (C) 25%
 - (D) 28%
325. In the school election James ran against Ben for secretary. James received 75% of the votes. If 240 students voted, how many votes did James receive?
- (A) 175
 - (B) 160
 - (C) 153
 - (D) 180
326. What percentage of students are between 60 and 63 inches tall? You will need the total number of students in order to calculate this.
- (A) 25.9%
 - (B) 60%
 - (C) 14.9%
 - (D) 7%
327. Olivia completed 85% of the Math questions. She still has 6 questions left. How many questions were there in total?
- (A) 32
 - (B) 45
 - (C) 50
 - (D) 40
328. Doris gets 19 questions right in her test and gets a mark of 76%. How many questions were in the test?
- (A) 24
 - (B) 25
 - (C) 26
 - (D) 27
329. The percent a quantity increases from its original amount
- (A) Percent Increase
 - (B) Percent
 - (C) Percent Change
 - (D) None of above
330. Another way to say "75%"
- (A) Three-quarters
 - (B) Three-fourth
 - (C) Four-thirds
 - (D) Three-four
331. John scored 90% on his English test. If there were 60 questions, how many did he answer correctly?
- (A) 54
 - (B) 45
 - (C) 50
 - (D) 60
332. If 23 out of 25 grapes were not squished. What percent of the grapes were squished?
- (A) 23%
 - (B) 92%
 - (C) 2%
 - (D) 8%
333. What is the percentage of Apprentices engaged in the factories?
- (A) 1.5% to 2.00% of the total strength of workers
 - (B) 2.00% to 5.00% of the total strength of workers
 - (C) 2.50% to 10.00% of the total strength of workers
 - (D) 3.00% to 12.00% of the total strength of workers
334. If the sales tax on a purchase worth Rs 60 is Rs 4.20. What will be the sales tax on the purchase worth of Rs 150?
- (A) RS 56.4
 - (B) RS 11.12
 - (C) RS 10.50
 - (D) RS 102.45
335. Terry, a plumber, worked 9 months out of the year. What percent of the year was Terry NOT WORKING?
- (A) 20% of the year
 - (B) 25% of the year
 - (C) 30% of the year
 - (D) 35% of the year

336. What PERCENT of 88 is 11?
(A) 8%
(B) .125
(C) 12.5%
(D) 8.0
337. Ezra made 96 cupcakes for a bake sale at his school. Of the 96 cupcakes, 58 are chocolate and the rest are vanilla. What percent of the cupcakes are vanilla? Round answer to the nearest percent.
(A) 38%
(B) 40%
(C) 60%
(D) 62%
338. In your class 6 students out of 30 students are left-handed. What percent of students are left-handed?
(A) 18%
(B) 20%
(C) 5%
(D) 60%
339. Jessica had \$30. She spent 20% of her money. How much money did she have left?
(A) \$6
(B) \$10
(C) \$24
(D) \$27
340. A flight from Melbourne to Sydney was discounted from \$499 to \$400. By what percentage was it reduced?
(A) 20%
(B) 30%
(C) 50%
(D) 60%
(E) 80%
341. In the statement "18 is 20% of 90", what is 20%?
(A) Base
(B) Rate
(C) Portion
(D) Percentage
342. Two sixth grade classes are raising money. Mrs. Shen's class raises \$120. Mr. McClary's class raises 50% of the amount Mr. Shen's class raises. How much money do the two classes raise in all?
(A) \$60
(B) \$170
(C) \$180
(D) \$240
343. How to describe 50%?
(A) Half
(B) A quarter
(C) Three quarters
(D) Just under
344. What is 100% of 38?
(A) 36
(B) 38
(C) 40
(D) 42
345. How would you compare the sizes of sections D and E if D is 15% and E is 20%?
(A) D and E are the same size.
(B) E is larger than D.
(C) E is 10% larger than D.
(D) D is larger than E.
346. What is 75% of 24?
(A) 6
(B) 18
(C) 20
(D) 16
347. There were 90 students in the gym last period. This period there are 36 people in the gym. What is the percent of change?
(A) 40%
(B) 54%
(C) 60%
(D) 9%

348. At an animal shelter, 12% of the cats are Siamese. If there are 75 cats at the shelter, how many are Siamese?
- (A) 9
(B) 12
(C) 54
(D) 63
349. There are red apples and green apples in the basket. 30% of the apples in the basket is green apples. There are 240 green apples in the basket. How many apples are there in the basket?
- (A) 80 apples
(B) 8000 apples
(C) 600 apples
(D) 800 apples
350. In 1999, the price of unleaded fuel was \$1.09. In 2015, the price of unleaded fuel is \$1.89. What is the percent change?
- (A) 173% increase
(B) 73% increase
(C) 73% decrease
(D) 27% increase
351. In a class of 30 kids, 3 forgot to get their report cards signed. What percent is that?
- (A) 3%
(B) 30%
(C) 10%
(D) 70%
352. Around 3,300 tonnes of food is discarded everyday, which constitutes around ____ of the total trash in Hong Kong.
- (A) One-fourth (25%)
(B) One-third (33%)
(C) Half (50%)
(D) None of above
353. Elaine has a collection of 300 CDs. Of these, 21% are Rock and Roll CDs. How many Rock and Roll CDs does Elaine have?
- (A) 25 CDs
(B) 16 CDs
(C) 60 CDs
(D) 63 CDs
(E) 68 CDs
354. Isabella ran 9 miles with her friend Kaylee last week. This was 60% of the distance she ran all week. How far did she run last week?
- (A) 9 miles
(B) 12 miles
(C) 15 miles
(D) 20 miles
355. Mother bought sack of 40 kg rice with the percent tare 0.8%. The net weight of rice is ____ kg.
- (A) 0.8
(B) 8
(C) 39.68
(D) 40.80
356. What is 20% of 55?
- (A) 11
(B) 110
(C) 1.1
(D) 18
357. What percent of the students have English as their favorite subject? Round to the nearest percent.
- (A) 21%
(B) 28%
(C) 17%
(D) 34%
358. James' grade in Math increased by 15%. If his last grade is 80, what is his grade now?
- (A) 82
(B) 85
(C) 88
(D) 92
359. Write 16.33% as a decimal.
- (A) 0.1633
(B) 1.633
(C) 0.163
(D) None of above

- 360.** There are 14 competitors finished a marathon under 4 hours. That represented 40% of the runners. How many competitors ran in the marathon?
- (A) 35 people total
(B) 7 people total
(C) 49 people total
(D) 20 people total
- 361.** Why do we always divide by the original value when finding percent change?
- (A) Because the new value should never be bigger than the original
(B) Because percent compares the change to the starting point
(C) Because it's easier to calculate smaller numbers
(D) Because it's gives a rounded number to work with
- 362.** Which problem had the highest percentage of children affected in School A in 2005?
- (A) Reading ability
(B) Spelling
(C) Following instructions
(D) Handwriting
- 363.** There are 100 cars for sale on Sam's car lot. 19 of the cars are red. What percent of the cars are red?
- (A) 19%
(B) 81%
(C) 1/5
(D) 38%
- 364.** What is 10% of 9?
- (A) 90
(B) 9
(C) 0.9
(D) None of above
- 365.** Out of 410 vehicles in the lot, 56 are pickup trucks. What percentage are pickup trucks?
- (A) 14%
(B) 18%
(C) 10%
(D) 12%
- 366.** The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?
- (A) Rs. 2000
(B) Rs. 2200
(C) Rs. 2400
(D) Data inadequate
- 367.** The percentage ratio of wage to cost of living index number is ____
- (A) Real wage
(B) Natural wage
(C) Original wage
(D) Artificial wage
- 368.** Loss or gain percentage is always calculated on the ____
- (A) Cost price
(B) Selling price
(C) Marked price
(D) Overhead expenses
- 369.** The girls in the University B are what percent of the boys in the University F?
- (A) 39.88%
(B) 46.88%
(C) 49.23%
(D) 42.63%
- 370.** What percent of films were rated PG?(The different ratings of 151 movies are shown below)
- (A) 40
(B) 90
(C) 26.5
(D) 10
- 371.** Use the percent proportion or percent equation to answer the following: Sarah earns \$20 in total, each day working after school. She

- spent 30% of her daily earnings on Monday. How much money did she spend on Monday?
- (A) \$1.40
(B) \$6
(C) \$0.60
(D) \$14
- 372.** A shop has an item reduced from \$800 to \$240. Is this 70% off?
- (A) Yes
(B) No
- 373.** Last year, a state university received 3,560 applications from boys. Of those applications, 35% were from boys who lived in other states. How many applications did the university receive from boys who lived in other states?
- (A) 1,246
(B) 124,600
(C) 12,460,000
(D) 124.6
- 374.** What percent of the annual sales were washers?
- (A) 20%
(B) 30%
(C) 25%
(D) 0.20%
- 375.** What would you use this map for?
- (A) To figure out how much rain has fallen in the US in different regions
(B) To figure out how much rain has fallen in the midwest in inches
(C) To figure out how much rainfall has decreased in the US
(D) To figure out the percentage rainfall has increased in the different regions of the US
- 376.** Mrs. Ciampa had 27 students in her class last year and this year she had 30 students in her math class. What is the percent of change?
- (A) 24%
(B) 20%
(C) 11%
(D) 50%
- 377.** If 8 out of 10 people buy lunch that day. What percentage do not buy lunch?
- (A) 80%
(B) 20%
(C) 8%
(D) 2%
- 378.** There were 150 students at the first home football game. Thirty students used a pass to get into the game. What percentage of the students used a pass to get into the game?
- (A) 10%
(B) 20%
(C) 30%
(D) 50%
- 379.** What is 25% of 120
- (A) 120
(B) 12
(C) 48
(D) 30
- 380.** What number is 20% of 102?
- (A) 204
(B) 122.4
(C) 20.4
(D) 20
- 381.** Percentage bar diagram has:
- (A) Equal width
(B) Data expressed in percentage
(C) Equal interval
(D) Equal width and equal interval
- 382.** At a supermarket, a certain item has increased from 75 cents per pound to 81 cents per pound. What is the percent increase in the cost of the item?
- (A) 80% decrease
(B) 8% increase
(C) 75% decrease
(D) 75% increase

- 383.** Find the percentage change (profit or loss) when \$150 becomes \$117?
(A) 22%
(B) 30%
(C) 78%
(D) 28%
- 384.** Mr. Smith has 32 bushels of corn. That amount is 80% of his total corn crop. How many bushels of corn does he have?
(A) 30
(B) 40
(C) 50
(D) 60
- 385.** Caroline took a math test and got 19 out of 25 questions correct. What percent of the questions did she answer correctly?
(A) 76%
(B) 66%
(C) 24%
(D) 54%
- 386.** Prerna decided to donate 15% of her salary to an orphanage. On the day of donation she changed her mind and donated Rs 2,896 which was 90% of what she had decided earlier. How much is Prerna's salary (approx)?
(A) 19500
(B) 17250
(C) 21450
(D) Can't be determined
- 387.** The bride and groom invited 120 guests for their wedding reception. 90 guests arrived. What percent of the guest list was not present?
(A) 92%
(B) 25%
(C) 20.9%
(D) 29.9%
- 388.** Part-to-Part Ratios: Convert 1:3 to percentage
(A) 33.33%
(B) 75%
(C) 25%
(D) 66.67%
- 389.** What is 10% of 180?
(A) 1.8
(B) 20
(C) 18
(D) 1800
- 390.** The middletown Zoo has 130 different exhibits. Of those 130 exhibits, 30% of them contain birds. How many exhibits contain birds?
(A) 49
(B) 39
(C) 60
(D) 25
- 391.** Find the Percent of Change. Round to nearest Percent. What is the markup rate on a \$470 ring that is now \$634.50?
(A) 26% Decrease
(B) 35% Decrease
(C) 35% Increase
(D) 26% Increase
- 392.** A student scored 420 marks out of 600. What percentage did he score?
(A) 65%
(B) 68%
(C) 70%
(D) 72%
- 393.** Norman got 90% of 70 items correct in a Math test. How many correct items did he get?
(A) 630
(B) 65
(C) 63
(D) 60
- 394.** At your birthday party there were 200 different colored balloons. Out of the 200 balloons 78 were blue. What percent of the balloons were blue?
(A) 39%

- (B) 78%
(C) 42%
(D) 75%
- 395.** How do you find 50% of a number?
(A) Cut the number in half.
(B) Move the decimal one place to the left.
(C) Move the decimal two places to the left.
(D) Move the decimal to the right.
- 396.** Last Saturday there were 320 visitors at Mount Sunapee in New Hampshire. 55% of the visitors were skiers and the rest were snowboarders. How many people were skiers? How many people were snowboarders?
(A) 176 skiers and 144 snowboarders
(B) 165 skiers and 155 snowboarders
(C) 55 skiers and 265 snowboarders
(D) 200 skier and 120 snowboarders
- 397.** Calculate 25% of 132
(A) 31
(B) 32
(C) 33
(D) 34
- 398.** Out of 20 attempts a basketball player scored 8 times. What percent of his chances did he score?
(A) 8%
(B) 16%
(C) 32%
(D) 40%
- 399.** In 2017/18 which BPC course had the highest percentage of BAME students?
(A) CGI
(B) Graphic Design
(C) Built Environment
(D) Computing
- 400.** What percent of the students surveyed drink less than 5 sodas a week?
(A) 35%
(B) 9%
- (C) 45%
(D) 65%
- 401.** Number of passengers who travel from Mumbai to Delhi in different days (in thousands) The total number of male passengers who travel on tuesday and wednesday is approximately how much % more than the number of male passengers who travel on Thursday?
(A) 50%
(B) 33%
(C) 75%
(D) 15%
- 402.** If 2 out of 21 typhoons happened in the last week, what percentage of typhoons occurred before the last week?
(A) 80%
(B) 85%
(C) 95%
(D) 90%
- 403.** A school has 1,000 students. If 40% of the students are boys, how many girls are there in the school?
(A) 40
(B) 400
(C) 600
(D) None of these
- 404.** What is the total percentage represented by sections G and H if G is 35% and H is 25%?
(A) 50%
(B) 70%
(C) 40%
(D) 60%
- 405.** If 20% of $a = b$, then $b\%$ of 20 is same as
(A) 4% of a
(B) 5% of a
(C) 20% of a
(D) None of these

406. Of the 200 guests invited to a wedding, 154 attended the wedding. What percent of the invited guests attended the wedding?
- (A) 154%
(B) 75%
(C) 77%
(D) 54%
407. Rhaul measured the heights of the apple trees in an orchard. What percent of the trees are 5-9 feet tall?
- (A) 18.9%
(B) 31%
(C) 22.1%
(D) 10%
408. The price of a motorbike is 1,500\$. How much do you need to pay if you get a 10% discount?
- (A) \$1350
(B) \$150
(C) \$1490
(D) \$1650
409. A class is 55% girls and has 20 girls. How many students are in the class?
- (A) 41 students
(B) 11 students
(C) 16 students
(D) 36 students
410. What percent of the students scored 91-100? Round your answer to the nearest whole percent.
- (A) 27 %
(B) 14 %
(C) 6 %
(D) 41 %
411. How are they showing the data of the students' favorite sports?
- (A) Fraction
(B) Percent
(C) Decimal
(D) None of above
412. What fraction of the fruits are Mango?
- (A) 21.7%
(B) 19.6%
(C) 65.2%
(D) 6.5%
413. Paul wants to buy a shirt for \$20. The percent he will save will be 40%. How much is his discount?
- (A) \$50 discount
(B) \$8 discount
(C) \$12 discount
(D) \$6 discount
414. Express the pizza sales of Pizza House as a percentage of the pizza sales of Little Secrets Pizza. Hint: $\frac{\text{sales of Pizza house}}{\text{sales of Little Secrets Pizza}} \times 100\%$
- (A) 97.5%
(B) 77.5 %
(C) 114 %
(D) 87.5%
415. The mayor of Flandville, Ohio, wants to know how much the population of her city has changed from 1975 to 2015. In 1975 the population was 120, 000. In 2015 the population was 95, 000. What was the percent decrease in the population from 1975 to 2015?
- (A) 21%
(B) 25%
(C) 26%
(D) 40%
416. How to describe 57%?
- (A) Almost half
(B) About a quarter
(C) Just above half
(D) Almost all
417. Find that 9 is equal to what percentage of 36
- (A) 50%
(B) 25%
(C) 40%
(D) 75%

418. What was the percentage of children in School A with concentration problems in 2005?
- (A) 35%
(B) 42%
(C) 30%
(D) 40%
419. Mariah took a test. Out of 12 questions she answered 9 correctly. What percent of questions did he score correctly?
- (A) 75%
(B) 50%
(C) 80%
(D) 85%
420. Which statement is not supported by the data?
- (A) $\frac{3}{5}$ of the students ride the bus or a bicycle to school.
(B) 15% of the students ride a car to school.
(C) More than 50% of the students ride a car or walk to school.
(D) 75% of the students do not walk to school.
421. A class has 30 students, and 40% of them are girls. How many girls are in the class?
- (A) 10
(B) 12
(C) 15
(D) 20
422. What was the approximate percentage increase in the sales of 55AH batteries in 1998 compared to 1992?
- (A) 32%
(B) 34%
(C) 38%
(D) 27%
423. Divya went to a textile shop. When Divya asked the price of a saree the shopkeeper told her the price by increasing 18% of the original cost. But Divya insisted on decreasing the price by 18% so the shopkeeper sold it by decreasing the price by 18%. What is the loss or profit percent of the shopkeeper?
- (A) 3.25%
(B) 2.5%
(C) 3%
(D) 3.225%
(E) None of these
424. About what percentage of students are 56-59 inches tall?
- (A) 44%
(B) 12%
(C) 120%
(D) 24%
425. What is 10% of 500?
- (A) 5
(B) 50
(C) .5
(D) 10
426. Jason has 40 pokemon in his pokedex. 22 of those are fairy type. What percentage of the pokemon are fairy type?
- (A) 45%
(B) 32%
(C) 55%
(D) 95%
427. Of 30 cricket players selected, half are allotted to senior the team and half to the junior team. 60% of players prefer the senior team and the rest prefer the junior team. What is the least number of players who will not be assigned to the team they prefer?
- (A) 3
(B) 4
(C) 5
(D) 6
(E) 7
428. A survey finds that 75% of 3400 Australians own at least one mobile phone. What is the expected number of these Australians who own at least 1 mobile phone?

- (A) 850
(B) 255
(C) 785
(D) 1700
(E) 2550
- 429.** What percent of cyclists finished in 60-64 minutes? Make a fraction first
(A) 30%
(B) 33%
(C) 25%
(D) 37.5%
- 430.** In one particular suburb, there are 18 families that own a bulldog. If these owners make up 75% of all dog owners in this suburb, then how many dog owners are there in this neighborhood? Round your answer to the nearest whole number if necessary.
(A) 20 owners
(B) 24 owners
(C) 11 owners
(D) 32 owners
- 431.** How would you describe 10-15%?
(A) A majority
(B) A minority
- 432.** Rani takes a 40 question test. She answers 5% of the questions incorrectly. How many questions does she answer correctly?
(A) 2 questions
(B) 95 questions
(C) 20 questions
(D) 38 questions
- 433.** Mrs. Peabody's classroom was collecting canned goods for a food drive. Her class set a goal of collecting 300 cans during the drive. At the end of the drive, her class only collected 270 cans. What percent of the goal did they meet?
(A) 70%
(B) 80%
(C) 90%
(D) 95%
- 434.** There are 32 students in a class. 9 of those students are girls. What percent are boys? (READ CAREFULLY FOR WHAT YOU ARE BEING ASKED TO FIND, and round to the nearest tenth)
(A) 71.9%
(B) 73.5%
(C) 32%
(D) 32.9%
- 435.** What is 40% of 80
(A) 8
(B) 16
(C) 24
(D) 32
- 436.** In 2017/18, what percentage of 18 year olds were given an unconditional offer?
(A) 64%
(B) 12%
(C) 32%
(D) 25%
- 437.** What is 150% of 60?
(A) 70
(B) 80
(C) 90
(D) 100
- 438.** "almost a quarter" is?
(A) 25%
(B) 35%
(C) 24%
(D) 31%
- 439.** Fifteen percent of the workers at Titan Industries earn minimum wage. If 24 workers earn minimum wage, how many workers are there at Titan Industries?
(A) 4
(B) 36
(C) 160
(D) 360

- 440.** What is 20% of 200 pieces of candy?
(A) 80
(B) 40
(C) 180
(D) 20
- 441.** In Mr. Moore's homeroom, 12 students play at least one sport. There are 30 students in Mr. Moore's class. What percent of the students do not play a sport?
(A) 4%
(B) 5%
(C) 40%
(D) 60%
- 442.** There is a jar of jellybeans on Ms. Truesdale's desk. 40% of the jellybeans are red. If there are 55 jelly beans in the jar, how many are red?
(A) 20
(B) 22
(C) 24
(D) 25
- 443.** Determine if you are finding the part, percent, or whole: What is 20% of 60?
(A) Part
(B) Whole
(C) Percent
(D) None of above
- 444.** In the Central City Grand Prix, out of 30 cars that started the race, 12 of them finished. What percent of the cars finished the race?
(A) 40%
(B) 20%
(C) 60%
(D) 80%
- 445.** Use the equation method to solve the following: "37% of what number is 20.72"?
(A) 178.5
(B) 56%
(C) 5.6
(D) 56
- 446.** What is 60% of 120?
(A) 72
(B) 12
(C) 0.12
(D) 720
- 447.** On Halloween, the 6th grade class made candy bags to give to the community. They made 80 cards in all and gave 40% of them to the hospital. How many Halloween bags did they give to the hospital?
(A) 30
(B) 31
(C) 32
(D) 33
- 448.** Joey has 8 pairs of socks in his drawer. Five of them are white. What percent of colored socks does Joey have? Round to the nearest whole number.
(A) 39
(B) 38
(C) 63
(D) 37
- 449.** What percent of 14 is 42?
(A) 300%
(B) 33%
- 450.** The price of a new car was \$3000 in April. The price of the car increased by 4% in May. Find the price of the car in May?
(A) \$3120
(B) \$2340
(C) \$2880
(D) \$4120
- 451.** In an examination, there were 1000 boys and 800 girls. 60% of the boys and 50% of the girls passed. Find the percent of the candidates failed?
(A) 46.4
(B) 48.4
(C) 44.4
(D) 49.6

452. There are 110 students in the 7th grade. 90 students showed up to school on the last day. What percentage is this? Round to the nearest whole percent.
- (A) 82
(B) 81
(C) 99
(D) 90
453. Determine if you are finding the part, percent, or whole: 18 is what percent of 36?
- (A) Part
(B) Percent
(C) Whole
(D) None of above
454. You can increase something by 20% by multiplying by ____
- (A) 0.20
(B) 1.20
(C) 20
(D) 120
455. What percentage of the players had less than 50 digs?
- (A) 60%
(B) 33.3%
(C) 40%
(D) 6.7%
456. To find Percent Increase or Decrease, subtract, divide by the original, and multiply by 100.
- (A) True
(B) False
457. What's another way to describe 15%?
- (A) Less than a fifth
(B) One in twenty
(C) Just under a quarter
(D) None of above
458. Turn into Percent Form: 0.33
- (A) 303%
(B) 33
(C) 33%
(D) 303
459. There are 36 carpenters in a crew. On a certain day, 29 were present. What percent showed up for work?
- (A) 81%
(B) 85%
(C) 83%
(D) 79%
460. If the price of petrol increased from 118.4 cents to 130.9 cents, the percentage change is:
- (A) 10.6%
(B) 9.5%
(C) 90%
(D) 1.1%
461. Which percentage of the children liked either dog, parrot, hamster or cat?
- (A) 100%
(B) 12.5%
(C) 25%
(D) 50%
462. Solve the percent proportion: 8 is 40% of what number?
- (A) 15
(B) 20
(C) 25
(D) 10
463. What is 28% of 96
- (A) 26.88
(B) 2,688
(C) 124
(D) 268.8
464. What is 30% of 250?
- (A) 0.12
(B) 75
(C) 0.0012
(D) 7,500

- 465.** The Rubber Ducky Company increased their production of ducks from 2,500 ducks last year to 3,250 ducks this year. By what percent did they increase their production?
- (A) 30%
(B) 77%
(C) 130%
(D) 177%
- 466.** The deer population is estimated to be 17,600 in northern Illinois, but an actual count was 21,300. What is the percent error?
- (A) 21%
(B) 17.3%
(C) 17.4%
(D) 21.02%
- 467.** Twenty-four out of forty pies at a bake sale are apple pies. What percent of the pies are apple?
- (A) 24%
(B) 40%
(C) 60%
(D) 75%
- 468.** Which word phrase below best describes the number: 50%?
- (A) A third
(B) A second
(C) A half
(D) Two-thirds
- 469.** Last year, a state university received 40% of its applications from boys. If they received 3,560 applications from boys, how many applications did they receive in all?
- (A) 89,000
(B) 1,424
(C) 14,240
(D) 8,900
- 470.** What is 114% as a decimal?
- (A) 114
(B) .114
(C) 11.4
(D) 1.14
- 471.** What is 30% of 100?
- (A) 30
(B) 300
(C) .3
(D) 65
- 472.** What is 0.2 as a percentage?
- (A) 0.2%
(B) 2%
(C) 20%
(D) 200%
- 473.** What is 50% of 330?
- (A) 33
(B) 150
(C) 165
(D) 3.3
- 474.** What is the first step when finding what is 25% of 136?
- (A) I multiply 25 times 136 and I get 3400.
(B) I take 136 and divide it by 100 and get a decimal. $136/100=1.36$
(C) I change 25% into a decimal. $25/100=0.25$
(D) None of above
- 475.** What percent of 60 is 9?
- (A) 15
(B) 5.4
(C) 667
(D) 54
- 476.** Raul measured the heights of the apple trees in an orchard. What percent of the trees are 10-14 feet tall?
- (A) 47.2%
(B) 25%
(C) 50.1%
(D) 17%

477. The price on some shares increased from \$13.40 per unit to \$15.60 per unit. What is the percentage change?
- (A) 2.2%
 - (B) 16.4%
 - (C) 14.1%
 - (D) 1.2%
 - (E) 0.9%
478. Camden rode his bike to school on 14 of the 20 school days in November. Which value is equivalent to the fraction of the school days in November that Camden rode his bike to school?
- (A) 70%
 - (B) 0.07
 - (C) 0.142
 - (D) 56%
479. What is 80% of 60?
- (A) 48
 - (B) 84
 - (C) 60
 - (D) 18
480. Sales of the Xbox One increased from 10,000 to 18,500 in November. What was the percent increase?
- (A) 8.5%
 - (B) 45.9%
 - (C) 85%
 - (D) 85.8%
481. Steve said that 1 out of 5 of his marbles are blue. What percent of Steve's marbles are blue?
- (A) 5%
 - (B) 50%
 - (C) 20%
 - (D) 1%
482. How to represent one quarter in percentage?
- (A) 25%
 - (B) 50%
 - (C) 75%
 - (D) 100%
483. It rained 10% of the 30 days last month. On how many days did it NOT rain?
- (A) 3 days
 - (B) 10 days
 - (C) 15 days
 - (D) 27 days
484. A coin contains 9 grams of nickel, and 16 grams of copper. Its total weight is 25 grams. What percentage of the metal in the coin is copper?
- (A) 64%
 - (B) 6%
 - (C) 14%
 - (D) 36%
 - (E) 156%
485. Paula found a sweatshirt that costs \$76. The sweatshirt is on sale for 25% off the original price. What is the amount of the discount on this sweatshirt?
- (A) \$19
 - (B) \$95
 - (C) \$57
 - (D) \$51
486. On Business Day, after 2 hours P6A sold 36% of their cookies. They found out they still had 128 cookies left to sell. How many cookies did they have in the beginning of Business Day?
- (A) 100
 - (B) 150
 - (C) 180
 - (D) 200
487. What is the percent of the shaded portion of the figure?
- (A) 20%
 - (B) 80%
 - (C) 60%
 - (D) 70%

488. Last year, there were 60 schools participated in Springfield Cup. This year, there is a 15% decrease in the numbers of schools participating Springfield Cup. How many schools participated in Springfield Cup this year?
- (A) 9
(B) 51
(C) 12
(D) 69
489. Bill is in a class of 15 boys and 35 girls. 40% of the students in the class take the bus to school. How many students do not take the bus to school?
- (A) 15
(B) 20
(C) 30
(D) 35
490. Which percent equation matches the following: What percent of 80 is 90?
- (A) $90 \cdot x = 80$
(B) $80 \cdot x = 90$
(C) $90 \cdot 80 = x$
(D) None of above
491. What is 16% of 60?
- (A) 9.6
(B) 12
(C) .096
(D) 26.7
492. Find 72% of 123
- (A) 8.856
(B) 88.56
(C) 885.6
(D) 8856
493. What percent of the tiles are green? Hint:
$$\frac{\text{Number of green tiles}}{\text{Total Number of Tiles (All colors)}} \times 100\%$$
- (A) 12%
(B) 24%
(C) 50%
(D) 86%
494. Chandler is in a class of 18 boys and 32 girls. If 30% of the students in Chandler's class take the bus to school, how many students do NOT take the bus to school?
- (A) 64 students do NOT take the bus
(B) 35 students do NOT take the bus
(C) 15 students do NOT take the bus
(D) 56 students do NOT take the bus
495. Last year you completed a survey of 300 questions. You were only able to complete 237 of the questions. What percent of the survey did you NOT complete?
- (A) 79%
(B) 21%
(C) 237%
(D) 25%
496. What is the language of fractions for 75%?
- (A) Half
(B) A quarter
(C) One in ten
(D) Three-quarters
497. How would you say 75% in other words?
- (A) One whole
(B) One quarter
(C) Three quarters
(D) One half
498. Which segment has the smallest percentage and what is that percentage?
- (A) 5%
(B) 15%
(C) 20%
(D) 10%
499. Of the 520 students in Grady Elementary, 65% ride the bus. How many students ride the bus?
- (A) 338 Students
(B) 65 Students
(C) 500 Students
(D) 585 Students
(E) 455 Students

500. The number of boys participating in the rally from school B is what percent of the total number of children participating in the rally from that school? (Rounded off to two digits after decimal.)
(A) 48.84
(B) 47.37
(C) 49.28
(D) 46.46
501. Mrs. Breon has 110 fiction books and 90 non-fiction books on her shelf. What percent of her library is non-fiction?
(A) 45%
(B) 90%
(C) 100%
(D) 10%
502. Hannah scored 60 out of 90 in a French test, 50 out of 80 in a drama test, 85 out of 130 in an art test and 13 out of 20 in a maths test. In which subject did she score the highest percentage? (Calculators are allowed)
(A) French
(B) Drama
(C) Art
(D) Maths
503. Find 3% of 5000 m
(A) 50 m
(B) 100 m
(C) 1500 m
(D) 150 m
504. Out of 50 children in a class, 20 are boys. Then the percentage of girls is
(A) 60
(B) 30
(C) $66\frac{2}{3}$
(D) 50
505. Mariah knows that 20% of travel club members have traveled outside the country. There are a total of 60 club members. How many have traveled outside of the country?
(A) 12
(B) 18
(C) 24
(D) 6
506. What is 25% of 140?
(A) 35
(B) 24
(C) 43
(D) 350
507. A percent added to the cost of an item to determine the selling price
(A) Percent Increase
(B) Markup
(C) Commission
(D) None of above
508. What percent of 50 is 18?
(A) 2.77%
(B) 277.8%
(C) .36%
(D) 36%
509. The number of people signed up for a bus trip increased from 32 to 45. What is the percent increase? Round to the nearest percent.
(A) 52%
(B) 41%
(C) 42%
(D) 45%
510. What is the total percentage of segments F and G combined?
(A) $X / Y\%$
(B) $X - Y\%$
(C) $X * Y\%$
(D) $X + Y\%$
511. Yesterday, there were 60 problems assigned for math homework. Albert did 30% of them correctly. How many problems did Albert get right?
(A) 20 correct
(B) 7 correct
(C) 30 correct
(D) 18 correct

512. What does “percent decrease” measure?
(A) The total amount after growth
(B) The amount of interest earned
(C) The combination of the original and new values
(D) How much a value drops compared to its original amount
513. In 2015, which problem had a higher percentage in School A than in School B?
(A) Verbal expression of ideas
(B) Handwriting
(C) Listening skills
(D) Spelling
514. There are 80 apples in a carton of apples. There are 24 red apples and the rest of the apples are green. What percentage of the apples are green?
(A) 60%
(B) 70%
(C) 80%
(D) 85%
515. What percent of the men had a cycling time of 60-64 minutes?
(A) 9 %
(B) 27 %
(C) 24.5 %
(D) 37.5 %
516. If a car factory checks 360 cars and 8 of them have defects, how many out of 1260 will have defects?
(A) 28
(B) 45
(C) 360
(D) 2880
517. Forty per cent of the employees of a certain company are men and 75% of the men earn more than Rs. 25,000 per year. If 45% of the company's employees earn more than Rs. 25,000 per year, what fraction of the women employed by the company earn Rs. 25,000 or less per year?
(A) $\frac{2}{11}$
(B) $\frac{1}{4}$
(C) $\frac{1}{3}$
(D) $\frac{3}{4}$
518. Which word phrase below best describes the percentage of 26%?
(A) Nearly three-quarters
(B) A vast majority
(C) Around two-thirds
(D) More than a quarter
519. What percentage relates to the number of people who like vanilla ice cream?
(A) 18
(B) 21
(C) 0.18
(D) 9
520. Find 25% of 140 g
(A) 34 g
(B) 70 g
(C) 35 g
(D) 14 g
521. The PTA's drive to get new members exceeded its goal by 10 percent. If the number of new members totaled 165, how many new members did the PTA have as its original goal?
(A) 140
(B) 145
(C) 150
(D) 155
(E) 160
522. Customers at an ice-cream shop took a survey. The results showed that 36 customers rated the shop as “5 Stars”. This number of customers represented 45% of the total number of customer who took the survey. What was the total number of customer who took the survey?
(A) 81
(B) 80
(C) 9
(D) 55

1.4.9 Ratio Based Data Interpretation

1. State if each pair of ratios forms a proportion
 $\frac{4}{3}$ and $\frac{8}{6}$
(A) Yes
(B) No
(A) 30:20
(B) 10:12
(C) 80:120
(D) 90:140
2. In a bag, there are blue and black marbles and no marble with any other color. The ratio of blue to black marbles is 3:8. Select that option which does not represent the ratio of blue to black marbles.
(A) 21: 56
(B) 33: 88
(C) 12: 40
(D) $\frac{3}{8}$
(E) 45/ 120
3. Identify the antecedents in the following ratios. 1:3, 4:5, 7:12
(A) 3,4,12
(B) 1,5,7
(C) 1,4,7
(D) 3,5,12
4. There are 14 boys and 8 girls in the school's Robotics Club. What is the ratio of girls to the total number of members in the club?
(A) 14:8
(B) 22:8
(C) 8:14
(D) 8:22
5. A math club has 25 members, of which 11 are males and the rest are females. What is the ratio of males to all club members?
(A) 2: 5
(B) 25: 11
(C) 5: 2
(D) 11: 25
6. There are 25 apples in a box. There are 15 red apples and 10 green apples. The ratio of the number of red apples to the number of green apples is ____
(A) 30:20
(B) 10:12
(C) 80:120
(D) 90:140
7. My little brother has 10 red skittles and 2 green skittles. How many times as many red skittles does he have than green ones?
(A) 5 times
(B) 12 times
(C) 8 times
(D) 20 times
8. The ratio of three numbers A, B and C is 1: 2: 3. The average of these three numbers is 48. What is the number of B?
(A) 24
(B) 96
(C) 48
(D) 144
9. Mrs. Shelly paid \$3 for 6 muffins and Mrs. Kloske paid \$9 for 18 muffins.
(A) Yes, equivalent
(B) No, not equivalent
10. The ratio of marbles to stones in a large pot is 6 to 7. If there are 42 marbles, then how many stones are there?
(A) 47
(B) 46
(C) 48
(D) 49
11. Part-to-Whole Ratios: Convert 5:9 to fraction
(A) $\frac{5}{9}$
(B) $\frac{9}{5}$
(C) $\frac{9}{14}$
(D) $\frac{14}{9}$
12. A classroom has 12 students who play soccer and 8 students who play basketball. What is

- the ratio of soccer players to basketball players?
- (A) 3:2
(B) 2:3
(C) 1:1
(D) 4:3
13. Find the ratio between the monkeys and bananas.
- (A) 4:5
(B) 5:4
(C) 4:9
(D) 5:9
14. A comparison of two quantities
- (A) Commission
(B) Gratuity
(C) Ratio
(D) None of above
15. Dave, Bob and Jia go to a concert together, the total of the tickets is \$150, the ratio is 1:2:7, calculate the money each person needs to pay.
- (A) \$15,\$30,\$105
(B) \$15,\$23,\$50
(C) \$15,\$32,\$45
(D) \$15,\$18,\$97
16. If there are 5 boys for every 7 girls in math class, how many boys are there if there are 35 girls?
- (A) 20
(B) 25
(C) 30
(D) 35
17. In the computer lab, there are 1 PC for every 5 Mac computers. If the computer lab has a total of 24 computers, how many are Mac?
- (A) 20
(B) 6
(C) 5
(D) 10
18. A buffet offers ranch or caesar dressing. The ratio of ranch dressing used to caesar dressing used is 8: 3. If the buffet uses 72 cases of ranch dressing, how many cases of caesar do they use?
- (A) 10
(B) 11
(C) 26
(D) 27
19. "The ratio of" represents what operation?
- (A) Addition
(B) Subtraction
(C) Multiplication
(D) Division
20. An amount of money is to be divided between P, Q and R in the ratio of 3: 7: 12. If the difference between the shares of P and Q is \$2400, what will be the difference between Q and R's share?
- (A) \$3000
(B) \$2400
(C) \$3200
(D) \$2800
21. Which ratio is different from the others?
- (A) 2 to 13
(B) 13: 2
(C) 2:13
(D) 2/13
22. There are a total of 63 bikes. If the ratios of blue bikes to black bikes is 4 to 5, how many of the bikes are BLUE?
- (A) 35
(B) 28
(C) 25
(D) 5
23. Sometimes you must use ratio reasoning for ____ to determine that two ratios are equivalent. Fill in the blank?
- (A) Ratio
(B) Equivalent Ratio
(C) Converting measurements
(D) Pi

24. Study the given graph and answer the question that follows. What is the ratio of the total daily sales of newspaper P in cities A and C to the total daily sales of newspaper Q in cities B and D?
- (A) 7:8
(B) 5:9
(C) 9:7
(D) 3:1
25. Felix has a collection of marbles of different colors, red, blue, and black, in the ratio 3:5:6. How many of each color is there in the 112 pieces of marble?
- (A) 23 red marbles 40 blue marbles 49 black marbles
(B) 24 red marbles 40 blue marbles 48 black marbles
(C) 24 red marbles 42 blue marbles 46 black marbles
(D) 27 red marbles 37 blue marbles 48 black marbles
26. There are 8 boys and 6 girls in a classroom. What is the ratio of boys to girls?
- (A) 4:3
(B) 7:5
(C) 4:2
(D) None of these
27. Find the ratio of 80 m. to 16 km.
- (A) 1: 200
(B) 200: 1
(C) 1: 20
(D) 20: 1
28. What is the second step to solving a ratio problem
- (A) Multiply
(B) Set up the proportion.
(C) Make sure the numbers are even
(D) Add
29. A baseball team has 16 girls and 8 boys. What is the ratio of total players to boys?
- (A) 16: 8
(B) 8: 24
(C) 24: 8
(D) 8: 16
30. The ratio of dogs to cats in a pet store is 3:2. Which of the following is an equivalent ratio?
- (A) 4:6
(B) 9:6
(C) 6:10
(D) 6:9
31. Which of the following options is a real life example of a ratio?
- (A) 12 noodles
(B) 4 meatballs: 1 cup of sauce
(C) 1 jar of sauce
(D) 15 desserts
32. Which ratio is proportional to the ratio $\frac{1}{5}$?
- (A) $\frac{2}{5}$
(B) $\frac{2}{10}$
(C) $\frac{5}{1}$
(D) $\frac{15}{20}$
33. Tom, Mike and William love collecting stamps. The ratio of their stamps is 4: 2: 3. Tom has 32 stamps. How many stamps does William have?
- (A) 72
(B) 64
(C) 24
(D) 8
34. Neelam's annual income is Rs. 288000. Her annual savings amount to Rs. 36000. The ratio of her savings to her expenditure is
- (A) 1: 8
(B) 1: 7
(C) 1: 6
(D) 1: 5
35. Wilson has 2 black, 3 red, and 5 white toy cars. What is the ratio of red toy cars to all the toy cars?
- (A) 3:5

- (B) 1:3
(C) 3:10
(D) None of above
36. Part-to-Part Ratios: Convert 7:3 to decimal
(A) 0.3
(B) 0.7
(C) 0.14
(D) 0.42
37. There are 20 girls and 15 boys in a class.(a) What is the ratio of number of girls to the number of boys?(b) What is the ratio of number of girls to the total number of students in the class?
(A) 4:3, 4:7
(B) 4:6, 3:5
(C) 6:3, 67:45
(D) 6:8
38. Changbin bought fruits in the supermarket. He bought bananas, mangoes, and strawberries, in the ratio 2:5:6. How many kilos of each fruit did he buy if the total kilo is 26 kilograms?
(A) 2 kg of bananas, 5 kg of mangoes, 6 kg of strawberries
(B) 3 kg of bananas, 10 kg of mangoes, 13 kg of strawberries
(C) 4 kg of bananas, 10 kg of mangoes, 12 kg of strawberries
(D) 5 kg of bananas, 10 kg of mangoes, 11 kg of strawberries
39. Simplify the ratio 75:10, 72:16:32, 140:112
(A) 15:2, 1:2:3, 18:5
(B) 15:2, 9:2:4, 5:4
(C) 15:2, 6:5:1, 9:1
(D) 15:2, 4:3:5, 2:3
40. There are 44 collies and 56 poodles. Which is the correct ratio for poodles to total number of dogs?
(A) 156:100
(B) 44:100
(C) 56:100
(D) 56
41. Find the greatest part if 63 is divided into the ratio 2:3:4
(A) 20
(B) 24
(C) 28
(D) 36
42. On a certain high school athletic team, the ratio of freshmen to sophomores to juniors to seniors is 1:3:4:6. If there are 60 juniors on the team, how many students in total are on the team?
(A) 90
(B) 140
(C) 150
(D) 180
(E) 210
43. Barry owns a small business. He spent \$15,000 on marketing expenses and \$5,000 in sales costs last year. He obtained 1,000 new customers. What is his customer acquisition cost (CAC)?
(A) \$10
(B) \$8
(C) \$20
(D) \$12
44. In a box of sweets $\frac{1}{2}$ of the sweets are gold. The rest are purple. What is the ratio of gold sweets to purple sweets?
(A) 1:1
(B) 1:2
(C) 2:1
(D) 1:3
45. There are 20 girls and 15 boys in a class. What is the ratio of number of girls to the number boys in the lowest term?
(A) 5:5
(B) 6: 7
(C) 4: 3
(D) 5: 9

46. In a math class the ratio of boys to girls is 15 to 8. If there are 16 girls in class, how many boys are there?
(A) 45
(B) 30
(C) 35
(D) 40
47. The relation between two numbers which shows how bigger one quantity is than another is called ____
(A) Proportion
(B) Ratio
(C) None of these
(D) None of above
48. Puan Kavitha prepared 5 pandan cupcakes and 11 chocolate cupcakes. What is the ratio of the pandan cupcakes to the chocolate cupcakes?
(A) 11: 5
(B) 16: 5
(C) 5: 11
(D) 5: 16
49. To make a pineapple slush you have to mix 150 g of ice and 200 g of pineapple. What is the ratio of the ice to pineapple?
(A) 3:4
(B) 4:3
(C) 3:7
(D) 7:3
50. The ratio of 25 minutes to 1 hour is
(A) 7:5
(B) 5:12
(C) 12:5
(D) 5:7
51. A box of fruits contains oranges and apples in the ratio of 4:2. If one box contains 54 fruits, how many boxes you need to deliver at least 144 apples?
(A) 5
(B) 7
(C) 10
(D) 8
52. In a class there are boys and girls in the ratio 5:6. What fraction are boys?
(A) $\frac{5}{11}$
(B) $\frac{6}{5}$
(C) $\frac{5}{6}$
(D) $\frac{6}{11}$
53. In a fruit bowl $\frac{3}{5}$ of the fruit are apples. The rest are oranges. What is the ratio of apples to oranges?
(A) 3: 5
(B) 5: 3
(C) 3: 2
(D) 3: 8
54. Marites solved 7 out of 10 problems correctly. What is the ratio of the number of correct answers to the number of wrong answers?
(A) 7:10
(B) 7:3
(C) 10:7
(D) 3:7
55. Taylor and Nancy shared a cash prize in the ratio 3:4. If Nancy received \$48, how much money did Taylor receive?
(A) 12
(B) 36
(C) 24
(D) 30
56. What is the ratio of blue dots to red dots?
(A) 6 to 5
(B) 5 to 6
(C) 5 to 11
(D) 11 to 5
57. Simplify the ratio 15:25 to its lowest terms.
(A) 3:5
(B) 4:7
(C) 2:5
(D) 5:3

58. Which of the following ratios are equivalent?
- (A) 1:3 and 3:1
 - (B) 4:6 and 8:6
 - (C) 8:7 and 16:12
 - (D) 22:14 and 11:7
59. If a box has red and blue balls in a ratio of 3:4 red to blue, how many red balls are there if 80 blue balls are in the box?
- (A) 40
 - (B) 60
 - (C) 80
 - (D) 30
60. What is ratio?
- (A) A comparison of two quantities
 - (B) When the only factor the numerator and denominator share is a one (1)
 - (C) A rate with a denominator of one(1)
 - (D) Two decimals that can be multiplied
61. A seed company says that 4 out of every 5 of its seeds will grow. If Melissa plants 40 of these seeds, then how many seeds is Melissa expected to grow? Use an equivalent ratio (proportion) to find the answer.
- (A) 50
 - (B) 32
 - (C) 10
 - (D) 8
62. What is the ratio of the number of residents who like movies to the number of residents who like picnics?
- (A) 2:1
 - (B) 1:2
 - (C) 3:1
 - (D) 1:3
63. What is the ratio of blue dinos to yellow dinos?
- (A) 3:7
 - (B) 3:10
 - (C) 7:10
 - (D) 7:3
64. A. What fraction of the children chose orange juice
- (A) $\frac{1}{2}$
 - (B) $\frac{1}{4}$
 - (C) $\frac{1}{8}$
 - (D) $\frac{3}{4}$
65. Which comparison statement is true about these figures?
- (A) $\frac{2}{5} > \frac{2}{3}$
 - (B) $\frac{3}{5} = \frac{1}{3}$
 - (C) $\frac{2}{5} < \frac{2}{3}$
 - (D) $\frac{2}{3} < \frac{2}{5}$
66. Galih invites some guests to his party. For every 5 guest, 3 of them are girls. What is the proportion of the number of boys being invited?
- (A) 3: 5
 - (B) 5: 3
 - (C) 2: 5
 - (D) 3: 8
67. A ratio is used to
- (A) Compare two like quantities
 - (B) Compare quantities that are smaller than one
 - (C) To write fractions
 - (D) Compare quantities that do not have the same units
68. Chris sold 25 tickets to the school play and Justin sold 35 tickets. What is the ratio of the number of tickets Chris sold to the number of tickets Justin sold?
- (A) 2:3
 - (B) 5:7
 - (C) 6:7
 - (D) 7:8
69. In an animal shelter, the ratio of dogs to cats is 5 to 3. There are 25 dogs. Write and solve a proportion to find the number c of cats.
- (A) C=15
 - (B) C=18

- (C) $C=21$
(D) $C=16$
70. Find the missing values in the ratio table.
(A) 35, 12
(B) 14, 100
(C) 15, 30
(D) Cannot be determined
71. In a mixture 60 litres, the ratio of milk and water 2: 1. If this ratio is to be 1: 2, then the quantity of water to be further added is:
(A) 50 litres
(B) 70 litres
(C) 80 litres
(D) 60 litres
72. Claire, Charlie and Jake share some sweets in the ratio 3: x: 4, where x is an integer. The sweets can be divided exactly: Claire got 42 and Charlie got 70. What is the value of x?
(A) 14
(B) 54
(C) 5
(D) Not enough information
73. The last 6 months of paychecks for a employee at a retail store: \$235, \$301, \$229, \$188, \$341, and \$280.
(A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
74. Claire, Charlie and Jake share 429 sweets in the ratio p: q: r where p, q, and r are integers and are not all the same. What is the smallest possible value of $p + q + r$?
(A) 3
(B) 9
(C) 11
(D) 13
75. There are two bananas for every four apples. What is the ratio of bananas to apples?
(A) 2: 4
(B) 4: 2
(C) 2: 6
(D) 4: 6
76. Which is NOT a ratio?
(A) Fraction
(B) A:B A to B
(C) A comparison of two quantities
(D) 25
77. What is the ratio of the number of red beads to the number of yellow beads?
(A) 2: 3
(B) 1: 3
(C) 1; 2
(D) 3: 2
78. Raghvendra has a total of 12 apples and 28 oranges. What is the ratio of apples to the total number of fruits?
(A) 3: 7
(B) 7: 3
(C) 3: 10
(D) 10: 3
79. Chocolates in a box are milk and white in the ratio 2:7. What fraction are white?
(A) $\frac{2}{9}$
(B) $\frac{7}{9}$
(C) $\frac{2}{7}$
(D) $\frac{7}{2}$
80. In the ratio x:y, y is called ____
(A) Ratio
(B) Antecedent
(C) Consequent
(D) Numerator
81. Will you get an equivalent ratio for $\frac{8}{10}$ if you add 2 to each number?
(A) Yes
(B) No

82. Which of the following is not a way to compare ratios?
(A) Part to part
(B) Whole to part
(C) Whole to whole
(D) Part to whole
83. There are 80 students in Mr. Bass' classes. The ratio of boys to girls is 2: 3. How many boys are in the classes? How many girls?
(A) Boys: 32 Girls: 48
(B) Boys: 48 Girls: 32
(C) Boys: 5 Girls: 15
(D) Boys: 15 Girls: 5
84. Emma and Liam share \$60 in the ratio 2:3. How much does Liam get?
(A) \$24
(B) \$28
(C) \$36
(D) \$40
85. A toy store has 30 action figures and 15 dolls. What is the ratio of action figures to dolls?
(A) 1:2
(B) 5:3
(C) 3:2
(D) 2:1
86. Zaleha has 10 apps on her iPad. 5 are school apps, 2 are music apps and 3 are games. What is the ratio of school apps to game apps?
(A) 5 to 2
(B) 5 to 10
(C) 3 to 5
(D) 5 to 3
87. Part-to-Whole Ratios: Convert 4:5 to decimal
(A) 0.4
(B) 0.5
(C) 0.8
(D) 0.9
88. The height of Apala is 150 cm. The height of Pari is 120 cm. The ratio of the height of Apala to the height of Pari is
(A) 4:5
(B) 5:4
(C) 5:2
(D) 4:1
89. There are 4 birds and 6 snakes. What is the ratio of birds to snakes?
(A) 6/4
(B) 2/3
(C) 1/3
(D) 10/16
90. Simplify the following ratio 100: 25: 50
(A) 1: 2: 5
(B) 10: 2.5: 5
(C) 4: 1: 2
(D) 3: 1: 2
91. Find ratio of 5m to 550cm
(A) 10: 11
(B) 11: 10
(C) 1: 11
(D) 1: 110
92. In his last game, the Rams' quarterback completed 10 out of 18 passes he threw. At this rate how many passes will he attempt if he completes 15 passes?
(A) 27
(B) 30
(C) 24
(D) 18
93. If 3:5 is an equivalent ratio to 12:x, what is the value of x?
(A) 15
(B) 10
(C) 25
(D) 20

94. In a box of sweets $\frac{7}{10}$ of the sweets are red. The rest are purple. What is the ratio of red sweets to purple sweets?
- (A) 3: 7
(B) 7: 3
(C) 3: 10
(D) 7: 10
95. Two numbers are in the ratio 2:5. If 16 is added to the numbers, their ratio becomes 1:2. The numbers are ____
- (A) 16, 40
(B) 20, 50
(C) 28, 70
(D) 32, 80
96. To make coffee, one small scoop of coffee grounds is added to 2 cups of water. Use the ratio table to find how many cups of water to use for 5 scoops of coffee.
- (A) 4
(B) 6
(C) 10
(D) 8
97. Rosanne's Pizzeria made 39 pizzas. 33 of the pizzas had thin crust and the rest had thick crust. What is the ratio of the number of thick-crust pizzas to the total number of pizzas?
- (A) 33:39
(B) 6:33
(C) 6:39
(D) 39:33
(E) 12:33
98. Jonas has 3 guitars. Geraldine has 4 guitars. If the ratio of guitars is 4:3, who is first in the ratio?
- (A) Jonas
(B) Geraldine
(C) Either could be first
(D) Guitar
99. Claire, Charlie and Jake share N sweets in the ratio 3: x: 4, where x is an integer. The sweets could be divided exactly, and Jake received 56.25% of them. What is the smallest value that N can be?
- (A) 36
(B) 12
(C) 16
(D) 9
100. Sam and Megan share Skittles in a ratio 4:1. If there are 60 Skittles in a large bag, how many do they each get?
- (A) 60 and 0
(B) 30 and 30
(C) 20 and 40
(D) 48 and 12
101. A basketball team won 15 games and lost 5 games. What is the ratio of games lost to the total games won?
- (A) 1:3
(B) 1:4
(C) 3:4
(D) 4:3
102. I have a total of 5 animals. 3 of them are hens. 2 of them are parrots. What is the hen to parrot ratio?
- (A) 2 to 3
(B) 2: 3
(C) 2 / 3
(D) 3: 2
103. The total number of students in a school is 2140. If the number of girls in the school is 1200, then what is the respective ratio of the total number of boys to the total number of girls in the school?
- (A) 26: 25
(B) 47: 60
(C) 18: 13
(D) 31: 79
104. The ratio of boys to girls in grade VIII is 4 to 5. There are 20 girls in total. How many boys are there in VIII grade?
- (A) 16

- (B) 15
(C) 20
(D) 14
- 105.** The ratio of red marbles to blue marbles is 4:5. If there are 36 red marbles, how many blue marbles are there?
(A) 16
(B) 32
(C) 45
(D) 50
- 106.** Joanne, Jane and Michael share out some money in the ratio 3: 6: 5. Michael gets \$20. How much does Jane get?
(A) \$15
(B) \$24
(C) \$56
(D) \$4
- 107.** Find the unit rate of the ratio below: 30 cm of snow in 6 hours
(A) 6 cm of snow per hour
(B) 30 cm of snow per hour
(C) 5 cm of snow per hour
(D) 3 cm of snow per hour
- 108.** A class has 75 students. If there are 50 boys. What is the ratio of girls to the class?
(A) 1: 3
(B) 3: 2
(C) 5: 7
(D) 2: 3
- 109.** Simplify the Terms of this Ratio 18:22
(A) 6:2
(B) 3:1
(C) 9:11
(D) 36:44
- 110.** Write the ratio of 30 treadmills to 36 elliptical machines in simplest form.
(A) 15/18
(B) 15:18
(C) 5 to 6
(D) 6/5
- 111.** A bicycle travels 65 miles in 5 hours. What is the ratio of miles traveled to hours taken?
(A) 15 miles per hour
(B) 13 miles per hour
(C) 10 miles per hour
(D) 5 miles per hour
- 112.** A ratio is
(A) Comparing a bunch of numbers
(B) A comparison between 2 quantities
(C) An estimation of an amount
(D) A variable
- 113.** A class has 30 students. 18 are boys. What is the ratio of boys to girls?
(A) 12:18
(B) 3:2
(C) 30:18
(D) 18:7
- 114.** In my fish tank, the ratio of red fish to blue fish is 3:5. There are 20 blue fish. How many red fish are there?
(A) 18
(B) 12
(C) 4
(D) 15
- 115.** A store sells 22 bottles of water for \$4. Use the ratio table to find the cost of 33 bottles.
(A) \$5
(B) \$8
(C) \$12
(D) \$6
- 116.** There are six hats and seven mittens. What is the ratio of mittens to total?
(A) 6:7
(B) 7:6
(C) 13:7
(D) 7:13

117. A proportion is a
(A) Ratio statement
(B) An "if-then" statement
(C) A statement of 2 ratios that are equal to each other
(D) A comparison
118. Students want hotdogs for lunch and 26 want hamburgers. What is the ratio of the number of students who want hot dogs to the number of students who want hamburgers?
(A) 26:10
(B) 10:26
(C) 10:36
(D) 25:36
119. Stephen and Vijay share out some money. Stephen gets \$496 and Vijay gets \$372. What is the ratio they used to share the money in, in its simplest terms?
(A) 3: 4
(B) 4: 3
(C) 496: 372
(D) 4: 7
120. In the ratio 7:3, what is the value of the consequent?
(A) 7
(B) 3
(C) 10
(D) 4
121. What is the ratio of bananas to apples?
(A) 5: 3
(B) 4: 6
(C) 2: 1
(D) 3: 5
122. A bakery has 24 loaves of bread and 16 pastries. What is the ratio of loaves of bread to pastries?
(A) 2:3
(B) 4:3
(C) 3:2
(D) 1:1
123. Which of the following is equivalent to 8:24?
(A) 1:2
(B) 1:3
(C) 2:3
(D) 3:1
124. The smallest ratio out of 1: 1, 2: 1, 1: 3 and 3: 1 is ____
(A) 1: 1
(B) 2: 1
(C) 1: 3
(D) 3: 1
125. In a fruit basket, there are 12 oranges and 8 bananas. What is the ratio of oranges to bananas?
(A) 3:2
(B) 1:1
(C) 2:3
(D) 4:3
126. What is the proportion of green triangles?
(A) 1 out of 3
(B) 1 out of 4
(C) 3 out of 4
(D) 3 out of 1
127. \$36 is shared among 3 people with a ratio of 1:3:2. How much does each person get?
(A) Person 1 will get \$6; person 2 will get \$18; person 3 will get \$12
(B) Person 1 will get \$12; person 2 will get \$30; person 3 will get \$24
(C) Person 1 will get \$1; person 2 will get \$3; person 3 will get \$2
(D) Person 1 will get \$6; person 2 will get \$24; person 3 will get \$8
128. There are 7 boys and 5 girls from the 6th grade marching band. What is the ratio of girls to boys?
(A) 13:7
(B) 13:5
(C) 7:5
(D) 5:7

129. Elsa has 12 balloons. Tyler has 48 balloons. Write the ratio of Elsa's balloons to Tyler's balloons.
- (A) 4:1
(B) 1:4
(C) 1:5
(D) None of above
130. Aliff purchased 25 fruits from a stall. 10 were oranges and the rest were plums. What is the ratio of plums to oranges?
- (A) 15: 10
(B) 10: 25
(C) 25: 15
(D) 10: 15
131. Marbles in a bag are green, blue and yellow in the ratio 4:5:1. What fraction are blue?
- (A) $\frac{5}{10}$
(B) $\frac{4}{5}$
(C) $\frac{4}{10}$
(D) $\frac{1}{10}$
132. If there are 5 soccer players, 10 baseball players, and 15 basketball players, what is the ratio of baseball players to soccer players?
- (A) 1 to 2
(B) 1 to 3
(C) 2 to 1
(D) 3 to 1
133. Jacob surveyed fourth graders about their favorite flavor ice cream. Thirty-five students chose cookie dough. Five times as many students chose cookie dough than cookies n cream. How many students chose cookies n cream?
- (A) 35
(B) 5
(C) 7
(D) 8
134. In the ratio a:b, a is called ____
- (A) Ratio
(B) Antecedent
(C) Consequent
(D) Denominator
135. Puan Sameen buys some ribbons to decorate a few wedding gifts. The length of the pink ribbon and the green ribbon is 7 m and 3 m respectively. What is the ratio of the total length of the ribbons to the green ribbon?
- (A) 3: 10
(B) 10: 3
(C) 7: 10
(D) 3: 7
136. The ratio of nurse to patient is 5: 37. How many nurses are needed to take care 629 patients?
- (A) 79
(B) 85
(C) 90
(D) 95
137. The ratio 5:15 simplifies to ____
- (A) 1: 3
(B) 1: 5
(C) 3: 1
(D) 3: 5
138. In the fruit bowl there are 4 apples, 2 bananas, and 5 pears. What is the ratio of pears to ALL fruit?
- (A) 5:4
(B) 5:11
(C) 2:5
(D) 6:5
139. If the ratio of three positive number is 3:7:8 and the sum of their squares is 7808, Then find the smallest number among them.
- (A) 24
(B) 27
(C) 30
(D) 36
140. What is the ratio of 6 to 9?
- (A) 4:5

- (B) 1:2
(C) 2:3
(D) 3:2
- 141.** Share 40 sweets in the ratio 5: 3
(A) 25: 15 sweets
(B) 15: 25 sweets
(C) 30: 10 sweets
(D) 5: 3 sweets
- 142.** In a certain apartment building, the ratio of tenants to cars is 3:5. If there are 30 tenants, how many cars are there?
(A) 35
(B) 60
(C) 18
(D) 50
- 143.** The ratio that describes how far an estimate is from the actual amount
(A) Percent Error
(B) Percent Change
(C) Percent
(D) None of above
- 144.** Ages of Ulfat, Arif and Ruslan are proportional to the numbers 2, 3 and 5, respectively. Since Ulfat is 5 years younger than Arif, how old is Ruslan?
(A) 30
(B) 25
(C) 40
(D) 45
- 145.** What is the ratio of triangles to circles?
(A) 3:4
(B) 4:3
(C) 3:5
(D) 4:5
- 146.** What is the ratio of total number of boys in University B and D together to the total number of girls in the same universities together?
(A) 25: 19
(B) 35: 21
(C) 20: 7
(D) 30: 13
- 147.** Which of the following is an equivalent ratio to $\frac{12}{60}$
(A) $\frac{2}{3}$
(B) $\frac{1}{5}$
(C) $\frac{4}{5}$
(D) $\frac{3}{8}$
- 148.** Joanne, Sarah and Claire share out some money in the ratio 3: 2: 3. Joanne gets \$18. How much money did they share out between them?
(A) \$54
(B) \$120
(C) \$174
(D) \$48
- 149.** If there are 5 Footballs and 7 Netballs, write the ratio of Netballs to Footballs.
(A) 5 is to 7
(B) 7 is to 5
(C) 5 is to 12
(D) 7 is to 12
- 150.** What is the proportion of red rectangles?
(A) 4 out of 7
(B) 4 out of 3
(C) 3 out of 7
(D) 3 out of 4
- 151.** The graph shows the total number of markers in 1, 2, 3, and 4 boxes of markers. What is the unit rate?
(A) 6
(B) 3
(C) 4
(D) 12
- 152.** What is the ratio of the number of boys in the University C to the number of boys in the University D?
(A) 9: 39

- (B) 3: 8
(C) 17: 35
(D) 4: 35
- 153.** A chess player played 20 games total. If he won 2 of the games, what is the ratio of games he lost to games he won?
(A) 1 to 9
(B) 2 to 20
(C) 9 to 1
(D) 20 to 2
- 154.** If the given ratio of 1: 6, add 4 to the antecedent and 2 to the consequent. Then the new ratio is
(A) 5: 6
(B) 1: 8
(C) 5: 8
(D) 8: 5
- 155.** In a bag of Jolly Ranchers, the ratio of blue to red is 3 to 4. If I have a 15 blue jolly ranchers, how many are represented in the entire tape diagram?
(A) 20
(B) 105
(C) 7
(D) 35
- 156.** On a spinner, 6 spaces are blue and 4 are green. What is the ratio of green to blue spaces?
(A) 6:4
(B) 4:6
(C) 4:8
(D) 2:3
- 157.** The ratio of red paint to yellow paint in a mixture is shown in the double number line above. How many teaspoons of yellow paint are in 4 batches?
(A) 20
(B) 4
(C) 12
(D) 15
- 158.** What is the ratio of circles to squares?
(A) 3:1
(B) 2:1
(C) 1:2
(D) 5:3
- 159.** A library has 15 fiction books and 10 non-fiction books. What is the ratio of fiction books to non-fiction books?
(A) 3:2
(B) 2:3
(C) 1:1
(D) 5:3
- 160.** Which of the following statements about ratio is true?
(A) A ratio is a comparison of two or more quantities.
(B) A ratio is only used in geometry.
(C) A ratio is always a whole number.
(D) A ratio is only used in algebra.
- 161.** Share 270g in the ratio 5: 3: 1
(A) 150g: 90g: 30g
(B) 150ml: 90ml: 30ml
(C) 50g: 30g: 10g
(D) 90g: 150g: 30g
- 162.** What is the ratio of fish to sharks?
(A) 8: 2
(B) 10: 2
(C) 2: 8
(D) None of above
- 163.** In an 8 round tennis tournament Petru wins 3, draws 1 and loses the rest. What is his ratio of wins: lose: draw?
(A) 3: 1: 4
(B) 4: 3: 1
(C) 3: 4: 1
(D) 4: 1: 3
- 164.** A school has 20 boys and 15 girls. What is the ratio of boys to girls in the school?
(A) 2:1

- (B) 5:3
(C) 3:4
(D) 4:3
165. Tim, Jude and Sasha share some money in the ratio 3: 4: 2. If Tim gets 18 Lei. How much did they share?
(A) 50 lei
(B) 100 lei
(C) 54 lei
(D) 58 lei
166. Given ratios 6:8 and 33:44, which statement is true?
(A) The first ratio is greater
(B) The second ratio is greater
(C) The ratios form a proportion
(D) The ratios do not form a proportion
167. The ratio that compares the amount of change to the original amount
(A) Simple Interest
(B) Percent Change
(C) Percent Increase
(D) None of above
168. What is an equivalent ratio to $\frac{3}{4}$?
(A) $\frac{1}{4}$
(B) $\frac{4}{5}$
(C) $\frac{12}{16}$
(D) $\frac{14}{18}$
169. In a box of sweets $\frac{1}{4}$ of the sweets are green. The rest are orange. What is the ratio of orange sweets to green sweets?
(A) 3: 1
(B) 1: 3
(C) 1: 4
(D) 4: 1
170. In an animal shelter, the ratio of cats to dogs is 3 to 5. If there are a total of 25 dogs at the shelter, how many cats do they have?
(A) 15
(B) 18
(C) 21
(D) 32
171. Luke has 5 dozens of eggs and 20 cups of flour. What is the ratio of eggs to cups of flour?
(A) 3:1
(B) 1:3
(C) 1:4
(D) 4:1
172. Two ratios that are equal are
(A) Similar sides
(B) Unit rates
(C) Congruent
(D) Proportional
173. Proportion is called the equality of ratios
(A) TRUE
(B) FALSE
174. What rate is represented by the following ratio: 50 grams for every $\frac{1}{3}$ of a day.
(A) 15 grams/day
(B) 1500 grams/day
(C) 150 grams/day
(D) 150 days/gram
175. A sports team has 18 players and 12 substitutes. What is the ratio of players to substitutes?
(A) 4:3
(B) 1:1
(C) 2:3
(D) 3:2
176. At a restaurant the ratio of kids meals sold to adult meals sold was 5: 4. If there were 20 kids meals sold, what is the combined amount of kids and adult meals sold?
(A) 36
(B) 29
(C) 20
(D) 9

177. The pet shop has 2 dogs, 4 cats, and 5 hamsters. What is the ratio of dogs to all pets?
(A) 2:4
(B) 2:5
(C) 2:11
(D) 11:2
178. Patrick has 2 black, 3 red, and 5 white toy cars. What is the ratio of red toy cars to all the toy cars?
(A) 3:5
(B) 1:3
(C) 3:11
(D) 3:10
179. In one day a movie store rented out 20 comedies. If the ratio of comedies rented to action movies rented was 4: 3, how many action movies were rented?
(A) 5
(B) 15
(C) 3.3333
(D) $4\frac{1}{3}$
180. In a fruit basket there are 5 apples, 7 pears and 10 bananas. What is the ratio of bananas to total fruit in simplest form?
(A) 10:12
(B) 22:10
(C) 5:11
(D) 11:5
181. Are 54: 90 and 84: 140 equivalent ratios?
(A) Yes
(B) No
182. A recipe called for the ratio of sugar to flour to be 5: 1. If you used 35 ounce of sugar, how many ounces of flour would you need to use?
(A) 10
(B) 5
(C) 6
(D) 7
183. A ratio equivalent to 2: 5 is
(A) 6: 15
(B) 4: 5
(C) 5: 2
(D) 9: 12
184. The ratio of the number of years in which the foreign exchange reserves are above the average funds to those in which the funds are below the average funds is:
(A) 2:5
(B) 3:4
(C) 2:6
(D) 3:5
185. What is a proportion?
(A) Two equal ratios
(B) Percent
(C) Part
(D) Whole
186. The ratio of purple sweets to red sweets is 2: 5. What fraction of the sweets are red?
(A) $\frac{5}{2}$
(B) $\frac{2}{5}$
(C) $\frac{2}{7}$
(D) $\frac{5}{7}$
187. There are 300 boys and 500 girls in a school. find the ratio of girls to total.
(A) 3:8
(B) 5:8
(C) 7:8
(D) 9:7
188. If there are 5 boys and 7 girls, write the ratio of girls to boys.
(A) 5 to 7
(B) 7 to 5
(C) 5 to 12
(D) 7 to 12
189. Which pair of ratios forms a proportion?
(A) 2:4 and 4:2

- (B) 16:4 and 24:6
(C) 10:30 and 6:24
(D) 4:12 and 8:16
- 190.** George and Tanya types in words in the ratio of 1: 5. They typed 864 words altogether. Find the number of words that each of them typed.
(A) George 264 words, Tanya 600 words
(B) George 144 words, Tanya 720 words
(C) George 264 words, Tanya 500 words
(D) George 464 words, Tanya 400 words
- 191.** Two ratios that express the same relationship between numbers is called ____
(A) Equivalent ratio
(B) Odds notation
(C) Ratio
(D) Fraction
- 192.** Part-to-Whole Ratios: Convert 3:5 to percentage
(A) 20%
(B) 30%
(C) 50%
(D) 60%
- 193.** For a school field day, 72 students are divided into 12 teams. If each team has the same number of students, use the ratio table to determine the number of students on 2 teams.
(A) 12
(B) 6
(C) 10
(D) 18
- 194.** The ratio of income to the expenditure of a family is 7: 6. Find the savings if the income is Rs.1400.
(A) Rs. 220
(B) Rs. 180
(C) Rs. 200
(D) Rs. 210
- 195.** If Mike has a ratio of 2 apples to 3 bananas, how many apples would you expect him to have if he has 15 bananas?
(A) 7
(B) 9
(C) 10
(D) 11
- 196.** Find the equivalent ratio of 3:4.
(A) 6:8
(B) 8:12
(C) 12:15
(D) 15:25
- 197.** Express the following ratio in simplest form:20:45
(A) 10:22.5
(B) 4:9
(C) 40:90
(D) 5:9
- 198.** Tell whether the ratios form a proportion.
 $\frac{25}{20}, \frac{15}{12}$
(A) Yes
(B) No
- 199.** What is the ratio of red circles to blue stars?
(A) 3:4
(B) $\frac{7}{4}$
(C) $\frac{11}{4}$
(D) 4 to 7
- 200.** The ratio of the number of ladies to gents at a party was 1: 2 but when 2 ladies and 2 gents left, the ratio became 1: 3. How many people were at the party originally?
(A) 6
(B) 12
(C) 24
(D) 36
- 201.** Having the same value or amount
(A) Equivalent
(B) Equation
(C) Estimate
(D) Value

- 202.** At an awards ceremony, 90 people are seated at 15 tables. If there are the same number of people seated at each table, use the ratio table to determine the number of people seated at each table.
- (A) 4
(B) 8
(C) 6
(D) 12
- 203.** At a movie premiere, the number of children, men and women who attended were in the ratio 2:3:4. If 236 children watched the premiere, how many persons were in the audience?
- (A) 826
(B) 1500
(C) 980
(D) 1062
- 204.** What is the value of A in the ratio table?
- (A) 84
(B) 7
(C) 28
(D) 82
- 205.** Peter and Ben share out some sweets in the ratio 5: 8. Ben gets 36 sweets more than Peter. How many sweets does Peter get?
- (A) 60
(B) 96
(C) 12
(D) 156
- 206.** A Ratio Equivalent to 5:7
- (A) 50:21
(B) 10:14
(C) 20:8
(D) 25:7
- 207.** Two equivalent ratios joined by an equal sign
- (A) Current ratio
(B) Proportion
(C) Quick ratio
(D) Quotient
- 208.** Determine the missing term to make each ratio equivalent. ____:2 = 3:1
- (A) 6
(B) 12
(C) 24
(D) 15
- 209.** Two equivalent ratios
- (A) Proportion
(B) Percent
(C) Proportional Relationship
(D) None of above
- 210.** It is the comparison between two numbers or quantities.
- (A) Congruence
(B) Similarities
(C) Proportion
(D) Ratio
- 211.** What is the ratio comparing two quantities of different units?
- (A) DISTANCE
(B) RATE/SPEED
(C) TIME
(D) None of above
- 212.** If the ratio of boys to girls in a class is 3:5, and there are 24 students in the class, how many boys are there?
- (A) 6
(B) 9
(C) 15
(D) 20
- 213.** Write down the ratio of red beads to yellow beads.
- (A) 1: 5
(B) 1: 4
(C) 1: 2
(D) 1: 3

214. Approximately what is the ratio of customers from Zone 1 to customers from Zone 3?
- (A) 3:5
(B) 3:2
(C) 2:1
(D) 1:2
215. A flowershop has 240 roses and sunflowers. The ratio of roses to sunflowers is 7:3. How many roses are there in the flowershop?
- (A) 168
(B) 144
(C) 96
(D) 72
216. In a college, the ratio of the number of boys to girls is 8:5. If there are 285 girls, what is the total number of students in the college?
- (A) 741
(B) 740
(C) 742
(D) 711
217. Which ratio is equivalent to 4:12?
- (A) 4:2
(B) 1:3
(C) 3:4
(D) 2:24
218. What is the ratio of dogs to cats:-
- (A) 8: 9
(B) 5: 6
(C) 8: 7
(D) 5: 9
219. Alexa, Celine, Nathalie, Gab and Shaun found a bag containing 1,000,000 Php. They came to an agreement to share the money according to the ratio 6:5:4:3:2, respectively. How much money will Gab receive?
- (A) 100,000 Php
(B) 50,000 Php
(C) 150,000 Php
(D) 200,000 Php
220. Hailey got a score of 20 in a 25-item test. What is the ratio of the number of correct items to the total number of items?
- (A) 1:4
(B) 4:1
(C) 4:5
(D) 5:4
221. Seats for Mathematics, Physics and Biology in a school are in the ratio 5: 7: 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?
- (A) 2: 3: 4
(B) 6: 7: 8
(C) 6: 8: 9
(D) None
222. If x, y and z are in proportion, then:
- (A) $X: y:: z: x$
(B) $X: y:: y: z$
(C) $X: y:: z: y$
(D) $X: z:: y: z$
223. In a pile of Sour Patch Kids, the ratio of green Sour Patch Kids to orange Sour Patch Kids is 7 to 3. If there are 42 green Sour Patch Kids, how many orange would there be?
- (A) 12
(B) 18
(C) 24
(D) 30
224. What is the ratio of red letters to blue letters?
- (A) 2:3
(B) 3:2
(C) 2:5
(D) 3:5
225. Jerry wants to buy cereal that comes in large and small boxes. The 32-ounce box costs \$4.16, and the 14-ounce box costs \$2.38. Which box is less expensive per ounce?
- (A) 32-ounce box
(B) 14-ounce box
(C) Both are the same
(D) Cannot be determined

226. The Northwestern huskies had a record of 25 wins and 45 losses. What was the ratio of wins to losses?
(A) 9:5
(B) 5:9
(C) 5:3
(D) 3:5
227. What is the proportion of yellow triangles?
(A) 2 out of 5
(B) 2 out of 3
(C) 3 out of 2
(D) 3 out of 5
228. A and B have money in the ratio 2: 1. If A gives Rs. 2 to B, the money will be in the ratio 1: 1. What were the initial amounts they had?
(A) Rs. 12 and Rs. 6
(B) Rs. 16 and Rs. 8
(C) Rs. 8 and Rs. 4
(D) Rs. 6 and Rs. 3
229. Ratio 7:5 $\rightarrow$ total 72
(A) 42
(B) 40
(C) 36
(D) 44
230. If 10 inches on a map represents an actual distance of 100 feet, then what actual distance does 25 inches on the map represent?
(A) 25 feet
(B) 100 feet
(C) 150 feet
(D) 250 feet
231. Are these ratios equivalent? 1 foot every 2 days, 4 feet every 8 days.
(A) Yes
(B) No
232. In an office, one in every three people are painters. Find the ratio of non-painters to painters.
(A) 1:2
(B) 1:3
(C) 2:1
(D) 2:3
(E) 5:2
233. When can two quantities be compared using ratio?
(A) If they are in different units
(B) If they are in the same unit
(C) If they are in different shapes
(D) If they are in different colors
234. A teacher had 21 red pens. If the ratio of red pens to blue pens she owned was 3: 1, how many pens did she have total?
(A) 24
(B) 28
(C) 21
(D) 20
235. The greatest ratio out of 2: 3, 5: 4, 3: 2 and 4: 5 is ____
(A) 4: 5
(B) 5: 4
(C) 3: 2
(D) 2: 3
236. What was the ratio of the number of children who chose milk to the number of children who chose soda?
(A) 4:1
(B) 1:4
(C) 8:10
(D) 4:5
237. The ratios 4:7 and 16:28 form a proportion.
(A) True
(B) False
238. Which has the greater ratio of water?
(A) 5 cups water to 1 cup concentrate
(B) 9 cups water to 3 cups concentrate

- 239.** An urn has four different colored balls. The ratio of blue balls to red balls is 3: 7 and the ratio of green balls to yellow balls is 9: 21. Are the ratios of blue balls to red balls and green balls to yellow balls equivalent?
(A) Yes, because the product of the means and extremes are both equal to 63.
(B) No, because the products are different.
- 240.** A survey shows that four out of seven students use mobile phones for online classes. If there are 560 grade 9 students in a high school, how many students use other gadgets for their classes?
(A) 240 students
(B) 320 students
(C) 440 students
(D) 560 students
- 241.** If $A : B = 2 : 3$ and $B : C = 4 : 5$, then $C : A =$ —.
(A) 15: 8
(B) 8: 15
(C) 9:15
(D) 25: 17
- 242.** Which ratios are equal to 3:16?
(A) 6:32,18:32
(B) 6:32,18:96
(C) 9:32,18:16
(D) 9:32,24:82
- 243.** What is the ratio of 100 grams to 250 grams?
(A) 2:5
(B) 1:2.5
(C) 4:1
(D) 5:2
- 244.** The pet store has 18 dogs toys for sale. 10 toys are frisbees and the rest are bones. What is the ratio of bones to frisbees in simplest form?
(A) 5/9
(B) 8/10
(C) 4/5
(D) 18/10
- 245.** Simplify this ratio 8:10:12
(A) 1:2:3
(B) 4:5:6
(C) 4:6:5
(D) 4:9:3
- 246.** Bob has 16 red cards and 20 green cards. What is the ratio of Bob's red cards to his green cards:
(A) 2:3
(B) 3:4
(C) 4:5
(D) 5:6
- 247.** The ratio of income of a person to his savings is 10: 1. If his savings for one year is Rs.6000, what is his income per month?
(A) 5200
(B) 6000
(C) 4800
(D) 5000
- 248.** Jay and Jake divided the money allowance in the ratio 4:5. If Jake's share is Php 345, find the total money.
(A) Php 276.00
(B) Php 285.00
(C) Php 621.00
(D) Php 1,380
- 249.** A bird's eggs are hatching! There are 12 yellow baby birds and 50 red baby birds. What is the ratio of yellow birds to red birds?
(A) 12:50
(B) 12:62
(C) 50:12
(D) 50:62
- 250.** At Toby's school, students wear a uniform. Students can choose from a red shirt or a white shirt. Using the tape diagram, what is the ratio of red shirts worn to white shirts worn?
(A) 1 to 4
(B) 1 to 5
(C) 4 to 1
(D) 4 to 5

251. The sum of two numbers is 84 and their ratio is 5:2. Find numbers.
(A) 60, 24
(B) 50, 34
(C) 55, 29
(D) 56, 28
252. In a team there are 240 members (Males and Females). Two-third of them are males. 15% of males are graduate. Remaining males are non-graduate. Three fourth of the females are graduate. Remaining females are non-graduate.3)What is the ratio between the total number of males and the number of females who are non-graduate?
(A) 4:1
(B) 6:7
(C) 8:1
(D) 3:4
253. The ratio of girls to boys is 3:8. If there are 48 boys, how many girls are there? Use the tape diagram to help you solve.
(A) 6
(B) 24
(C) 18
(D) 72
254. The ratio of brownies to cookies is 3:5. If there are 75 cookies, how many brownies are there?
(A) 15
(B) 32
(C) 45
(D) 60
255. What is the symbol used to denote ratio?
(A) ;
(B) :
(C) =
(D) /
256. Three quarters of the junior members of a tennis club are boys and the rest are girls. What is the ratio of boys to girls?
(A) 3:4
(B) 4:3
(C) 1:3
(D) 3:1
257. Find the ratio
(A) 20:14
(B) 20:15
(C) 15:20
(D) 14:21
258. Which ratio is smaller?(3: 5) or (8: 13)
(A) 3: 5
(B) 8: 13
259. Determine the missing term to make each ratio equivalent. 4: ____ = 3:6
(A) 6
(B) 8
(C) 3
(D) 15
260. Which one below is not in Ratio form?
(A) 5:1
(B) 5 to 1
(C) 5(1)
(D) 5/1
261. A: B: C is in the ratio of 3: 2: 5. How much money will C get out of Rs 1260?
(A) 25
(B) 125
(C) 503
(D) 630
262. When buying out for her sister's birthday surprise, Gabby bought 156 balloons and party hats. If the ratio of party hats to balloons is 8:5, how many balloons did Gabby buy?
(A) 60
(B) 74
(C) 82
(D) 96

263. Mrs. Malyemezian mixed 4 gal of red paint with every 6 gal of blue paint in order to make purple paint. Which ratio of gallons of red paint to gallons of blue paint will make the same shade of purple paint?
- (A) 12:18
(B) 5:7
(C) 8:30
(D) 12:8
264. Express this ratio in simplest form!! There are 16 male teachers out of 40.
- (A) 16:40
(B) 2:5
(C) 2:9
(D) 90:75
265. The school librarian counted books by type. She found 256 biographies and 1,024 mysteries. Which statement is true?
- (A) There are 4 times as many mysteries as biographies.
(B) There are 4 times as many biographies as mysteries.
(C) There are 768 times as many mysteries as biographies.
(D) There are 768 times as many biographies as mysteries.
266. What is it called when two or more of the same units are being compared?
- (A) Rate
(B) Ratio
(C) Proportion
(D) Unit Rate
267. Tell whether the ratios form a proportion. 12 : 22 and 18 : 33.
- (A) Yes
(B) No
268. The ratio of boys to girls in history class is 4 to 5. How many girls are in the class if there are 12 boys in the class?
- (A) 12 girls
(B) 15 girls
(C) 5.3 girls
(D) 27 girls
269. If a basketball player makes 9 baskets in 12 tries, what is the ratio of baskets to tries in lowest terms?
- (A) 1:3
(B) 3:6
(C) 4:3
(D) 3:4
270. What is the ratio of the number of strawberries to the total number of fruit?
- (A) 4: 2
(B) 6: 4
(C) 2: 4
(D) 2: 6
271. Find the ratio in which rice at Rs. 7.20 a kg be mixed with rice at Rs. 5.70 a kg to produce a mixture worth Rs. 6.30 a kg.
- (A) 1:3
(B) 2:3
(C) 3:4
(D) 4:5
272. In a class, one out of every six students fails. If there are 42 students in the class, how many pass?
- (A) 38
(B) 36
(C) 34
(D) 35
273. In a zoo, there are 15 lions and 10 tigers. What is the ratio of lions to tigers?
- (A) 3:2
(B) 2:3
(C) 1:1
(D) 5:3
274. The age of ram and Shyam is in the ratio 2: 1. If the age of Ram is 10 years, what is the age of Shyam?
- (A) 20 years

- (B) 10 years
(C) 5 years
(D) None of above
275. There are 25 silver coins and 47 gold coins in William's coin collection. What is the ratio of the number of silver coins to the number of gold coins?
(A) 47:25
(B) 25:72
(C) 47:72
(D) 25:47
276. In the word 'BALLOONS', the ratio between vowel letters and consonant letters is ____
(A) 1: 2
(B) 3: 5
(C) 2: 5
(D) 3: 4
277. What is an equivalent ratio to 1: 5?
(A) 2 to 12
(B) 3 to 15
(C) 4 to 15
(D) 5 to 20
278. Kelly has 10 apps on her iPad. 5 are school apps, 2 are music apps, and 3 are games. What is the ratio of school apps to game apps?
(A) 5 to 2
(B) 3 to 5
(C) 5 to 10
(D) 5 to 3
279. What is the ratio of apples to oranges in a basket containing 12 apples and 8 oranges?
(A) 3:2
(B) 4:3
(C) 2:3
(D) 3:4
280. In a cake recipe, it is said that you are to mix 600g of butter with 1600g of flour. What is the ratio of butter to flour?
(A) 3:8
(B) 3:80
(C) 8:3
(D) 80:30
281. A school has a total of 3,300 students. The ratio of female to male students is 4: 7. How many female students are there?
(A) 1,180
(B) 1,200
(C) 2,000
(D) 2,100
282. The red ribbon is 60 cm long while the blue ribbon is 75 cm long. Suppose $\frac{4}{5}$ of the original lengths of the red ribbon and blue ribbon are used for the bouquet. What is the new ratio of the length of the red ribbon to the length of the blue ribbon?
(A) Ratio, 4:5
(B) Ratio, 3:4
(C) Ratio, 4:3
(D) Ratio, 5:4
283. A ratio with a denominator of one
(A) Ratio
(B) Unit Rate
(C) Scale Factor
(D) None of above
284. What is the ratio of rabbits to dogs?
(A) 2 to 4
(B) 3 to 4
(C) 1 to 3
(D) None of above
285. Jenny has 3 guitars. Steve has 4 guitars. If the ratio of guitars is 4:3, who is first in the ratio?
(A) Jenny
(B) Steve
(C) It doesn't matter
(D) Andy Griffith
286. What is the ratio of the number of boys to the number of girls?
(A) $\frac{4}{3}$

- (B) $\frac{3}{7}$
(C) $\frac{4}{7}$
(D) $\frac{1}{3}$
- 287.** In a bunch of flowers $\frac{1}{3}$ of the flowers are tulips. The rest are roses. What is the ratio of roses to tulips?
(A) 3: 1
(B) 1: 3
(C) 1: 2
(D) 2: 1
- 288.** There are 480 students in Marla's school. In her classroom, there are 3 left-handed students and 17 right-handed students. Predict the number of left-handed students in the whole school.
(A) 72
(B) 85
(C) 124
(D) 208
- 289.** Use cross multiplication or 'W' method to determine if these ratios are equivalent: $\frac{2}{3} = \frac{10}{15}$
(A) No
(B) Yes
- 290.** There are 10 blocks in a box. 6 are blue and 4 are green. What is the ratio of blue to green blocks?
(A) 6:4
(B) 10:6
(C) 4:6
(D) 10:4
- 291.** The Lakewood Wildcats won 5 of their first 7 games this year. There are 28 games in the season. About how many games would you expect the Wildcats to win this season?
(A) 20 games
(B) 35 games
(C) 2 games
(D) 4 games
- 292.** What is the ratio of red to blue rectangle?
(A) 2: 7
(B) 2: 5
(C) 5: 2
(D) 5: 7
- 293.** A ratio equivalent to 3:7 is
(A) 3:9
(B) 6:10
(C) 9:21
(D) 18:49
- 294.** Write down the ratio from blue beads to black beads.
(A) 10:1
(B) 1:10
(C) 8:10
(D) 9:4
- 295.** What is it called when you set two ratios equal to each other?
(A) Proportion
(B) Fraction
(C) Ratio
(D) Congruent
- 296.** Ravi walks 6 km in an hour while Roshan walks 4 km in an hour. What is the ratio of the distance covered by Ravi to the distance covered by Roshan?
(A) 3:2
(B) 3:5
(C) 9:2
(D) 3:2::6:4
- 297.** Of 300 students in the cafeteria, 140 had lunch. Write the ratio of the students in the cafeteria to the students that had lunch.
(A) 30:14
(B) 12:7
(C) 15:7
(D) 5:2

- 298.** In a zoo, the ratio of monkeys to lions is 9:6. If there are 58 animals in total, how many monkeys are there?
(A) 24
(B) 34
(C) 40
(D) 52
- 299.** Lime juice and water is mixed in the ratio 2:5 to make lemonade. If 140 ml of lime juice is used, find how much lemonade can be made
(A) 490 ml
(B) 140 ml
(C) 100 ml
(D) 40 ml
- 300.** Are the following ratios equivalent? 20:5 and 4:1
(A) No
(B) Yes
- 301.** Cost of dozen book is Rs 180 and cost of 8 notebook is Rs 56. Find the ratio of cost of book to cost of a notebook.
(A) 10:7
(B) 180:56
(C) 15:7
(D) None of the above
- 302.** What is the ratio of 1 hour to 300 minutes?
(A) 1:5
(B) 5:1
(C) 1:12
(D) 12:1
- 303.** Which is NOT a correct way to write a ratio?
(A) 3: 4
(B) 3=4
(C) 3/4
(D) 3 to 4
- 304.** Solve the ratio 3:5.
(A) 4/5
(B) 1/2
(C) 3/5
(D) 2/5
- 305.** In a pet store, there are 10 rabbits and 5 hamsters. What is the ratio of rabbits to hamsters?
(A) 3:1
(B) 1:1
(C) 1:2
(D) 2:1
- 306.** A manufacturer fills an order for 4,200 smart phones. The quality inspector selects a random sample of 60 phones and finds that 4 are defective. How many smart phones in the order are likely to be defective?
(A) 70 smart phones
(B) 900 smart phones
(C) 1,050 smart phones
(D) 280 smart phones
- 307.** If the Hawks won 100 games and lost 60, what is the simplified ratio of wins to losses?
(A) 10 to 6
(B) 5 to 3
(C) 6 to 10
(D) 3 to 5
- 308.** What is the ratio of girls who chose soccer to girls who chose basketball?
(A) 6 girls chose soccer for every 7 girls chose basketball.
(B) 7 girls chose soccer for every 6 girls chose basketball.
(C) 6 girls chose basketball for every 7 girls chose soccer.
(D) 6 girls chose soccer for every 5 girls chose basketball.
- 309.** Henry has 4 blueberry pop-tarts, 3 strawberry pop-tarts, 2 s'more pop-tarts, and 1 cherry pop-tarts. What is the ratio of S'more pop-tarts to total pop-tarts, in simplest form?
(A) 1:5
(B) 1:10
(C) 2:10
(D) 2:5

- 310.** In a bag the ratio of red balls to green balls is 4: 5. what fraction of the balls are red?
(A) $\frac{4}{5}$
(B) $\frac{4}{9}$
(C) $\frac{5}{9}$
(D) $\frac{1}{2}$
- 311.** Identify the consequents in the following ratios. 1:3, 4:5, 7:12
(A) 3,4,12
(B) 1,5,7
(C) 1,4,7
(D) 3,5,12
- 312.** There were 5 ice cream cones for every 3 brownies sold at the ice cream shop. If there were 24 brownies sold, how many ice cream cones were sold?
(A) 8
(B) 15
(C) 40
(D) 29
- 313.** In a class of 40, the ratio of boys to girls is 3:5. How many are girls? How many are boys?
(A) 10 boys and 30 girls
(B) 20 boys and 20 girls
(C) 12 boys and 28 girls
(D) 15 boys and 25 girls
- 314.** The ratio of 8 mangoes to 44 mangoes is 2: 11.
(A) True
(B) False
- 315.** There are 36 students in the gym class. The ratio of boys to girls is 4:2. Using the Ratio, Find out how many boys are in the gym class.
(A) 24 Boys
(B) 12 Boys
(C) 18 Boys
(D) 16 Boys
- 316.** A bag of marbles comes with 3 blue marbles, 2 red marbles, and 5 yellow marbles. What is the ratio of red to yellow?
(A) 2 to 5
(B) 5 to 3
(C) 3 to 5
(D) 5 to 2
- 317.** If the rangers won 100 games and lost 60, what is the simplified ratio of wins to losses?
(A) 10 to 6
(B) 5 to 3
(C) 6 to 10
(D) 3 to 5
- 318.** Which ratio is equivalent to 5 to 4
(A) 25 to 20
(B) 10 to 12
(C) 4 to 5
(D) 15 to 8
- 319.** The ratio of girls to boys in a chess club was 5:4. There were 32 boys. How many girls were there in the club?
(A) 40
(B) 45
(C) 35
(D) 36
- 320.** In a mixture of milk and water, the ratio of milk to water is 5:2. If there are 14 liters of water, how many liters of milk are there?
(A) 35
(B) 18
(C) 24
(D) 42
- 321.** A cookie recipe calls for 2 cups of sugar for every 3 cups of flour. Complete the table to show equivalent ratios for this recipe.
(A) $\frac{3}{6}$
(B) $\frac{8}{12}$
(C) $\frac{5}{15}$
(D) $\frac{5}{6}$

- 322.** The ratio of trucks to cars sold at Marathon Motors during the year is about 2 to 5. If the company sold about 500 cars last year, about how many trucks did it sell?
- (A) 200
(B) 250
(C) 300
(D) 500
(E) 700
- 323.** Raj and Sam received votes in the ratio of 5: 3. If a total of 64 people voted, how many votes respectively did Raj and Sam received?
- (A) 50 and 14
(B) 40 and 24
(C) 30 and 34
(D) 55 and 9
- 324.** Which ratio doesn't belong to the group?
- (A) 9: 36
(B) 8: 24
(C) 12: 36
(D) 10: 30
- 325.** The first quantity in ratio is called ____
- (A) Antecedent
(B) Consequent
(C) Consecutive
(D) Means
- 326.** Write the simplest form of given ratio:24:60
- (A) 2:3
(B) 3:5
(C) 2:5
(D) 4:5
- 327.** The number of hours students spend studying per week is classified as:
- (A) Nominal
(B) Ordinal
(C) Interval
(D) Ratio
- 328.** A fruit stand has 18 apples and 12 pears. What is the ratio of apples to pears?
- (A) 1:1
(B) 4:3
(C) 2:3
(D) 3:2
- 329.** If a recipe calls for 2 cups of flour and 3 cups of sugar, what is the ratio of sugar to flour?
- (A) 2:3
(B) 3:2
(C) 5:6
(D) 2:5
- 330.** In a school the ratio of the number of teachers to the number of pupils is 1:20. If the number of pupils is 840, how many teachers are there?
- (A) 40
(B) 800
(C) 42
(D) 840
- 331.** Six shops-P, Q, R, S,T, U-sell six products-A, B, C, D, E, F-as shown in the table below. The table shows the number of units (N) and price per unit (P) for a particular product in a particular shop.2) What is the ratio between the amount earned by shop Q by selling product A and the amount earned by shop U by selling product B?
- (A) 25:24
(B) 24:29
(C) 25:27
(D) 24:25
- 332.** \$15 for 5 pairs of socks; \$25 for 10 pairs of socks. Are the ratios equivalent?
- (A) Yes, equivalent
(B) No, not equivalent
- 333.** What fraction of the campers chose canoeing as their favorite activity?
- (A) $\frac{1}{2}$
(B) $\frac{1}{4}$
(C) $\frac{1}{5}$
(D) $\frac{1}{3}$

- 334.** Taylor is decorating her Halloween costume for her mermaid tail. When making her tail she does 10 pearls for every 12 scales. What is the ratio of scales to pearls in simplest form?
- (A) 6:5
(B) 10:12
(C) 12:10
(D) 5:6
- 335.** The ratio of 6th graders to 7th graders at a basketball game is 4:1. If there are eight 7th graders, how many 6th graders are there?
- (A) 28
(B) 16
(C) 8
(D) 32
- 336.** What is the ratio of blue to orange animals?
- (A) 4 to 3
(B) 3 to 1
(C) 4 to 7
(D) None of above
- 337.** Find the ratio of 30 minutes to 45 minutes.
- (A) 2:3
(B) 3:2
(C) 3:4
(D) 45:30
- 338.** The ratio of Joyce's weight to Nica's weight to Aiza's weight is 5:3:2. Express Aiza's weight as a fraction of Joyce's weight.
- (A) $10/25$
(B) $10/12$
(C) $80/120$
(D) $90/140$
- 339.** What is the missing number in the ratio table?
- (A) 72
(B) 85
(C) 76
(D) 90
- 340.** Dave gets to work late on days when it rains. If the ratio of dry days to wet days is 4:1, how many days in a working week is Dave late?
- (A) 0
(B) 1
(C) 2
(D) 4
- 341.** Express 9:12 as a simple ratio.
- (A) 4:3
(B) 3:4
(C) 3:5
(D) 4:5
- 342.** At a theme park there are boys, girls and adults in the ratio 7:5:3. What fraction are adults?
- (A) $3/15$
(B) $7/15$
(C) $5/15$
(D) $3/7$
- 343.** A school has 671 students and 61 teachers. What is the lowest term ratio of students to teachers?
- (A) 671: 61
(B) 1: 11
(C) 11: 1
(D) None of the above.
- 344.** A school choir is made up of girls and boys in the ratio 4: 3. There are 35 students in the choir altogether. How many students are boys?
- (A) 15
(B) 5
(C) 10
(D) 20
- 345.** Find the ratio of green circles to all the shapes
- (A) 4:7
(B) 4:4
(C) 4:15
(D) 7:15

346. If you have 3 apples, 4 oranges, and 5 cherries; which represents the following ratio: oranges to total number of fruit?
(A) 4:5
(B) 3:12
(C) 4:12
(D) 5:12
347. If $a:b = c:d$ then a, b, c and d are called ____
(A) Ratio
(B) Proportion
(C) Continued proportion
(D) Antecedent
348. In the Madison Middle School band, the ratio of girls to boys is 4 to 5. If there are 63 total students in the band, how many of them are girls? (HINT! Use a ratio table to help you!!)
(A) 35
(B) 28
(C) 9
(D) 21
349. The ratio of boys to girls in a class is 5: 4. If there is a total of 36 students, find the number of boys and girls respectively.
(A) 30 boys, 6 girls
(B) 15 boys, 21 girls
(C) 20 boys, 16 girls
(D) 10 boys, 26 girls
350. Out of 30 students in a class, 6 like football, 12 like cricket and remaining like tennis. Find the ratio of (a) Number of students liking football to number of students liking tennis. (b) Number of students liking cricket to total number of students.
(A) . 1:2 and b). 2:5
(B) . 4:5 and b). 5:7
(C) . 5:8 and b). 4:6
(D) . 5:9 and b). 3:8
351. What is the ratio of green marbles to red marbles?
(A) $\frac{3}{2}$
(B) $\frac{3}{1}$
(C) $\frac{3}{3}$
(D) $\frac{2}{3}$
352. Which is NOT equivalent to 3:5?
(A) 15:25
(B) 9:15
(C) 21:28
(D) 30:50
353. The ratio to the number boys to the number of girls in a band class is 9 to 10. There are 20 girls in the band class. How many boys are in the band class?
(A) 18
(B) 21
(C) 39
(D) 110
354. Share 100 in the ratio 7: 10: 3
(A) 70: 100:30
(B) 35: 50: 15
(C) 14: 20: 6
(D) 700: 1000: 300
355. If a ratio is 2:3, how many parts are there in total?
(A) 2
(B) 3
(C) 4
(D) 5
356. Which of the following ratios is greater? 3:4 and 1:2
(A) 1:2
(B) 3:4
(C) 3:4
(D) None of the above
357. How can equivalent ratios be obtained?
(A) By adding the numerator and denominator
(B) By subtracting the numerator and denominator
(C) By changing the units of the quantities

- (D) By multiplying or dividing the numerator and denominator by the same number
- 358.** Using the letters of the phrase STATE OF MASSACHUSETTS write a ratio for vowels to consonants. Simplify.
- (A) 1:2
(B) 13:7
(C) 1:7
(D) 7:13
- 359.** Mr. Perez allocates his monthly salary for bills, food, transportation and other expenses at the ratio of 3:3:2:2. If he received P28,450.00 last month, how much did he spend for food?
- (A) P2,845.00
(B) P5,690.00
(C) P8,535.00
(D) P11,380.00
- 360.** For a recipe, Brutus uses 4 cups of sugar for every 5 cups of flour. Which of the following show equivalent ratios for sugar to flour?
- (A) $4/5 = 8/10 = 12/15$
(B) $4/5 = 5/6 = 6/7$
(C) $4/5 = 3/4 = 2/3$
(D) $4/5 = 8/15 = 16/45$
- 361.** Tell whether the ratios form a proportion. $3.2 : 8$ and $1.6 : 4$
- (A) Yes
(B) No
- 362.** What is the ratio of blue to yellow rectangle?
- (A) 2: 5
(B) 3: 5
(C) 2: 3
(D) 3: 2
- 363.** Express the ratio as a fraction in simplest form: 18 ounces to 3 cups
- (A) 6 to 1
(B) $1/6$
(C) $18/3$
(D) $3/18$
- 364.** The ratio of the number of apples to the number of oranges is ____
- (A) 3 to 2
(B) 2 to 3
(C) 3 to 5
(D) 2 to 5
- 365.** Luz earns \$400 for 40 hours of work. Use a ratio table to determine how much she earns for 6 hours of work.
- (A) \$60.00
(B) \$20.00
(C) \$40.00
(D) \$10.00
- 366.** Express 5:8 in the ratio n:1
- (A) 1:1.6
(B) 1.6:1
(C) 0.625:1
(D) 6.25:1
- 367.** Divide 60 in the ratio of 2: 3
- (A) 27 and 58
(B) 33 and 66
(C) 24 and 36
(D) None of these
- 368.** A proportion is
- (A) A quadratic equation
(B) A formula to find the unknown
(C) Expression that states the equality of two ratios
(D) The product of two equal quantities
- 369.** State True or False:-In finding the ratio, the order of the ratio is not important.
- (A) False
(B) True
- 370.** Write a part-to-part ratio for the problem situation using a colon.
- (A) 45:31
(B) 31:45
(C) 31:76
(D) 45:76

371. In a certain room, there are 28 women and 21 men. What is the ratio of women to the total number of people?
(A) 4:3
(B) 2:3
(C) 4:7
(D) 1:2
372. In Sarah's classroom there are 5 girls and 19 boys. What is the ratio of the number of girls to boys?
(A) 5:24
(B) 19:5
(C) 5:19
(D) 19:24
373. A part of a bag contains a ratio of 3 small band-aids and 2 large band-aids. In the whole bag, there are 32 large band-aids. When writing a proportion, you would compare?
(A) 3 small band-aids to 32 large band-aids
(B) 2 large band-aids to 32 large band-aids
374. A group of preschoolers has 8 boys and 24 girls. What is the ratio of girls to all children?
(A) 24: 32
(B) 8: 24
(C) 24: 8
(D) 16: 32
375. At a pet store the ratio of cats to dogs sold was 10: 1. If there were 60 cats that were sold, how many dogs were sold?
(A) 7
(B) 20
(C) 10
(D) 6
376. Simplify the ratio 20:36
(A) 5:9
(B) 5:6
(C) 5:8
(D) 10:18
377. What is the respective ratio of the total number of girls participating in the rally from schools D and E together to the total number of boys participating in the rally from schools A and B together?
(A) 23: 18
(B) 43: 35
(C) 41: 38
(D) 21: 20
378. What is the ratio of eggplants to tomatoes? Write the ratio in its simplest form.
(A) 4:2
(B) 2:3
(C) 1:3
(D) 4:3
(E) 1:6
379. Identify the proportional part if the total is 40 and the ratio is 2:5.
(A) 11.43
(B) 15.25
(C) 20.5
(D) 8.75
380. Which statement best describes what a ratio is.
(A) A number
(B) A comparison of two quantities using division.
(C) A comparison
(D) A comparison of many things.
381. A comparison of two quantities using division called ____.
(A) Ratio
(B) Proportion
(C) Percent
(D) Scaling
382. The length and breadth of a rectangular park are 50 m and 40 m respectively. Find the ratio of the length to the breadth of the park
(A) 4:5
(B) 4:1
(C) 5:1
(D) 5:4

- 383.** Solve the following problem: If a box contains 12 apples and 8 oranges, what is the ratio of apples to oranges?
- (A) 3:2
(B) 2:1
(C) 4:3
(D) 5:4
- 384.** A student bought 34 pencils for school. If he sharpened 16 of the pencils before school, what is his ratio of unsharpened pencils to sharpened pencils?
- (A) 36 to 16
(B) 16 to 34
(C) 9:8
(D) 8:9
- 385.** Find the ratio of number of circles and number of squares inside the following rectangle:
- (A) 3:1
(B) 2:1
(C) 2:3
(D) 3:2
- 386.** The ratio of violin players to flute players in the school's orchestra is 5:3. What does this mean?
- (A) There are 2 more violin players than flute players.
(B) There are 5 more violin players than flute players.
(C) For every 5 violin players, there are 3 flute players.
(D) For every 5 flute players, there are 3 violin players.
- 387.** Gabby went to a restaurant with her brother, and the total cost of the meal is \$100, work out how much each has to pay, knowing the ratio is 16:8.
- (A) \$66.66, \$44.44
(B) \$33.33, \$22.22
(C) \$22.22, \$44.44
(D) \$66.66, \$33.33
- 388.** There are 13 male teachers and 5 female teachers at Margo's School. What is the ratio of female teachers to male teachers?
- (A) 5:13
(B) 3:5
(C) 18:10
(D) 26:5
- 389.** At a farm the ratio of cows to horses was 10:3. If there were 20 cows at the farm, how many horses were there?
- (A) 10
(B) 3
(C) 20
(D) 6
- 390.** Charles has 7 baseball cards, and Tracy has 10 baseball cards. What is the ratio of Charles's cards to Tracy's cards?
- (A) 7:10
(B) 10:7
(C) 10:17
(D) None of above
- 391.** Ten soccer players were going to a soccer tournament with their three coaches. What is the ratio of coaches to players?
- (A) 10: 3
(B) 10:13
(C) 3: 10
(D) 3:13
- 392.** Study the following information carefully and answer the given questions based on it. The table shows the number of trees planted by the government in 6 different years. Find the respective ratio between the number of neem trees planted in the year 2015 and the number of banyan trees planted in the year 2014
- (A) 9:7
(B) 3:5
(C) 7:9
(D) 5:1

- 393.** William and Emma buy a racehorse. William pays \$3000 and Emma pays \$4000. Write the ratio of the amount they each pay in its simplest form.
- (A) 3: 4
(B) 2: 3
(C) 1: 2
(D) 5: 4
- 394.** Ratio of 350 g to 3 kg is
- (A) 116: 1
(B) 60: 7
(C) 7: 60
(D) None
- 395.** Two numbers are in ratio of 21: 26. If 8 is added in each, the new numbers are in ratio of 5: 6. Find the ratio of numbers, if 6 is subtracted from each number?
- (A) 18: 23
(B) 19: 25
(C) 6: 7
(D) 9: 16
- 396.** Ella has 5 balloons. Taylor has 7 balloons. Write the ratio of Ella's balloons to Taylor's balloons.
- (A) 7:5
(B) 5:7
(C) 3:5
(D) 5:3
- 397.** Sam and Ryan share some coins in the ratio 4: 9. Ryan gets 65 more coins than Sam. How many coins does Ryan get?
- (A) 146.25
(B) 117
(C) 169
(D) 52
- 398.** Ratio of 500ml to 2 litres is:
- (A) 1:4
(B) 1:6
(C) 1:2
(D) 1:3
- 399.** Which ratio is equal to 15:20?
- (A) 5:10
(B) 18:25
(C) 21:28
(D) 24:30
- 400.** The ratio of P and Q is 3:5. If $P = 27$, find Q.
- (A) 35
(B) 41
(C) 45
(D) 50
- 401.** In a class there are 30 boys and 12 girls. Find the ratio of number of boys to number of girls.
- (A) 2: 5
(B) 5: 2
(C) 3: 4
(D) None of the above
- 402.** A class has 15 boys and 20 girls. What is the boy:girl ratio in simplest form?
- (A) 4 to 5
(B) 10 to 13
(C) 3:4
(D) 3:5
- 403.** Avery counts cars and trucks on a road trip. She counts 22 trucks and 45 cars. What is the ratio the number of cars to trucks?
- (A) 45:67
(B) 45:22
(C) 22:67
(D) 22:45
- 404.** The price of the mobile was rupees 12000. Its price decreased in the ratio 7: 4. What is the decreased price?
- (A) 8857.15
(B) 7857.15
(C) 6867.15
(D) 6857.15

1.4.10 Average Based Data Interpretation

1. The Chins used records of their past expenditures to complete their budget sheet for the upcoming year. If their average monthly living expenses are \$848, their fixed monthly expenses average \$1,305, and their annual expenses are \$3,816 what amount should they expect to spend monthly?
(A) \$318
(B) \$497
(C) \$2,471
(D) \$5,969
2. The marks obtained by 5 students are 21, 27, 19, 26, 32. Later on 5 grace marks are added to each student. What are the average marks of the revised marks of the students?
(A) 35
(B) 30
(C) 25
(D) 20
3. Alfonso plays basketball on a team. He has played three games so far. In the first game, he scored 10 points. In the second game, he scored 16 points. In the third game, he scored 7 points. What is Alfonso's average points per game?
(A) 9 Points
(B) 10 Points
(C) 11 Points
(D) None of above
4. Virat Kohli scored 6,3,1,2,6,3 in a inning, and MS Dhoni scored 2,5,6,4,2,1 in a inning. Find the average score of both the players and tell who won the match?
(A) Virat Kohli
(B) MS Dhoni
5. What is the difference between the average scores of Australia and England?
(A) 18.2
(B) 18.6
(C) 18.5
(D) 18.4
6. The average (arithmetic mean) of 4 numbers is greater than 11.5 and less than 14.5. Which of the following could NOT be the sum of these four numbers?
(A) 47
(B) 49
(C) 59
(D) 55
(E) 57
7. Compare the two data sets: Set A (2, 4, 6) and Set B (1, 3, 5). Which set has a higher average?
(A) Set A has a higher average.
(B) Both sets have the same average.
(C) Set B has a higher average.
(D) Set A and Set B have no average.
8. The Blue Star Taxi Company has locations in several cities. Today in New York City, the company transported 1,667 people. In Washington DC, it transported 2,318 people. In Austin, it transported 1,542. In Miami, it transported 1,823 people. How many people did Blue Star Taxi Company transport, on average, in these cities?
(A) 1,673.4
(B) 1,791.5
(C) 1,837.5
(D) 1,843.7
(E) 1,916.2
9. A set of 6 numbers had an average of 48. One number was removed and now the average of the remaining numbers is 49. Which number was removed?
(A) 48
(B) 44
(C) 43
(D) 41

10. You are a chemist in a lab. You are currently testing several chemical solutions for various properties. You have 6 test tubes, which contain the following amounts of solution: 68 mL, 43 mL, 56 mL, 77 mL, 39 mL, and 83 mL. What is the average amount of solution in the test tubes?
- (A) 39
(B) 46
(C) 56
(D) 61
(E) 62
11. On the semester final, Devin scored a 12, Levi scored a 15, and Espy scored a 18. What was the average score for these students? ____
- (A) 15
(B) 273
(C) 111
(D) None of above
12. In a physics experiment, the average speed of a car is calculated over 4 different trials. The speeds recorded in meters per second are: 20, 22, 21, and 23. What is the average speed of the car?
- (A) 21 m/s
(B) 22 m/s
(C) 20 m/s
(D) 23 m/s
13. You work as an amusement park greeter. On Monday, 407 people entered the park. On Tuesday, 385 people entered. On Wednesday, 444 entered. What is the average number of people who entered the park on those days?
- (A) 411
(B) 412
(C) 413
(D) 41
(E) 1,236
14. Anika, Zoe, and Aiden are in a class. Their weights are recorded as follows: Anika weighs 40kg, Zoe weighs 45kg, and Aiden weighs 50kg. What is their average weight?
- (A) 45
(B) 52
(C) 47
(D) 42
15. Find the mean number of phones.
- (A) 2.56
(B) 2.3
(C) 1.5
(D) 2.2
16. In a set of values, the average of the first 6 values was 85 and average of the remaining 8 values was 4.5. What was the overall average of all the values together?
- (A) 40
(B) 39
(C) 39.5
(D) 14
17. Calculate the average of the numbers 14, 28, 42, 56, and 70.
- (A) 28
(B) 42
(C) 56
(D) 70
18. A scientist records the mass of four identical metal samples: 50 g, 48 g, 52 g, and 50 g. What is the average mass?
- (A) 50 g
(B) 49 g
(C) 51 g
(D) 52 g
19. Find the average: 10, 2, 6, 14, 1, 3
- (A) 11
(B) 6
(C) 36
(D) 15
20. Find the average of first 5 consecutive even numbers starting from 2 to 10, where the last even number is 10.
- (A) 1
(B) 6

21. David obtained 76, 65, 82, 67 and 85 marks (out in 100) in English, Mathematics, Physics, Chemistry and Biology. What are his average marks?
(A) 65
(B) 69
(C) 72
(D) 75
22. The number of pages that Carolyn wrote in her journal each day from Monday to Friday is shown below: 9, 8, 12, 6, 10. What is the mean number of pages she wrote per day?
(A) 5
(B) 6
(C) 9
(D) 11
23. Shonda's 6 test scores have an arithmetic mean of 78%. What is the total of her test scores?
(A) 468
(B) 428
(C) 418
(D) 484
24. Find the average of the numbers 11, 22, 33, 44, and 55.
(A) 22
(B) 33
(C) 44
(D) 55
25. Calculate the average of the following set of numbers: 10, 15, 20, 25, 30
(A) 20
(B) 15
(C) 25
(D) 35
26. Corinne bought three boxes of tea for \$7 each and five boxes of tea for \$5 each. What was the average price of one box of tea?
(A) 5.75
(B) 23
(C) 6
(D) None of above
27. Amelia wants to bring down her average mile time down to 7 minutes. She has run 6 miles this year with an average time of 7 minutes 30 seconds. What time does she need to average on her next 8 miles to achieve her goal?
(A) 6.8 minutes
(B) 6.6 minutes
(C) 6 minutes
(D) 5.9 minutes
28. Mandy earns money by delivering groceries. She earned \$4 on Monday, \$7 on Tuesday, \$5 on Wednesday, \$4 on Thursday, and \$5 on Friday. What is the average amount of money Mandy earned per day?
(A) 3
(B) 4
(C) 5
(D) 6
29. If the average of five numbers is 27, and the sum of the first four numbers is 100, what is the fifth number?
(A) 35
(B) 40
(C) 38
(D) 43
30. What vocabulary word means "the average"?
(A) Median
(B) Mean
(C) Mode
(D) Range
31. Ashley scored 80, 80, 83, 85, 90, and 77 on her tests this semester. If she wants an average of 85 on all of her test, what would her score need to be on her final test?
(A) 85
(B) 95
(C) 97
(D) 100

32. The average weight of 16 boys in a class is 50.25 kg and that of the remaining 8 boys is 45.15 kg. Find the average weights of all the boys in the class.
- (A) 47.55 kg
(B) 48 kg
(C) 49.25 kg
(D) 48.55 kg
33. Alan's average grade for the past two terms was 82.5%. What grade would he have to earn in the next term to raise his average grade to 85%?
- (A) 87.5
(B) 91.5
(C) 85
(D) 90
34. The mean of five numbers is 40. The mean of the two smallest numbers is 25. What is the mean of the other three numbers?
- (A) 40
(B) 45
(C) 50
(D) 60
35. You are selling tickets to a college football game. At your university's student union, you manage to sell 197 tickets. You sell 85 tickets on the campus green, and you sell 162 tickets in front of the stadium. What is the average number of football tickets you sell?
- (A) 148
(B) 153
(C) 159
(D) 163
(E) 168
36. Based on the following scenario, what is the difference in lifetime income over 30 years of employment for individuals with 2-year vocational training and graduate degrees? 2 year vocational training = \$52,000 average annual salary Post graduate degree = \$76,000 average annual salary
- (A) \$720,000
(B) \$7,200
(C) \$7,200,000
(D) \$72,000
37. Harley read 5 books in January, 8 books in February, 4 books in March, and 7 books in April. What is the average number of books Harley read per month?
- (A) 3
(B) 4
(C) 5
(D) 6
38. In the last 5 games, Kevin Durant scored 22, 22, 18, 12, and 21 points. What is Durant's Mean (Average) score per game?
- (A) 19 points per game
(B) 95 points per game
(C) 18.6 points per game
(D) 22 points per game
39. Jean loves to go bird watching. One day, she saw 7 birds. The next day, she saw 11 birds. The next day, she saw no birds. What is the average number of birds Jean saw each day?
- (A) 3
(B) 4
(C) 5
(D) 6
40. Archie's four test scores were 95, 96, 89, and 92. What was his average?
- (A) 93
(B) 91.5
(C) 75
(D) 92
41. Lisa read 45 pages of a book on Monday, 30 pages on Tuesday, and 75 pages on Wednesday. What is the average number of pages she read per day?
- (A) 45 pages
(B) 50 pages
(C) 55 pages
(D) 60 pages

42. Clayton plays basketball on a team. He has played three games so far. In the first game, he scored 10 points. In the second game, he scored 14 points. In the third game, he scored 6 points. What is Clayton's average points per game?
- (A) 30
(B) 12
(C) 3
(D) 10
43. Mohit Sharma scored 52 runs on an average in four innings. He scored a duck in fifth innings. His average of five innings was:
- (A) 41 runs
(B) 41.6 runs
(C) 40 runs
(D) 41.5 runs
44. Mrs Smart spent \$5 on Monday, \$6 on Tuesday, \$8 on Wednesday and \$5 on Thursday at Yossi's tuckshop. What is the average amount she spent?
- (A) \$8
(B) \$5.50
(C) \$5
(D) \$6
45. Average-is NOT the sum of all addends divided by the number of addends.
- (A) True
(B) False
(C) I don't know
(D) Maybe
46. Maggie had three tests this week. She earned 100, 96, and 50. What was the mean/average of her test scores?
- (A) 81
(B) 82
(C) 83
(D) 84
47. Find the average of 16 & 21
- (A) 18.5
(B) 19.5
(C) 17.5
(D) None of above
48. Find the average number of water drops: 22 drops, 40 drops, 37 drops
- (A) 28 drops
(B) 33 drops
(C) 30 drops
(D) 37 drops
49. Betsy has scored a 94, 80, 89, 91 and 90 on her math tests. What must Betsy score on her next test to have a mean of exactly 90?
- (A) 96
(B) 91
(C) 90
(D) 89
50. The average of runs of a cricket player of 10 innings was 32. How many runs must he make in his next innings so as to increase his average of runs by 4?
- (A) 72
(B) 40
(C) 74
(D) 76
51. If you score 76, 85, 97, and 82 on your math tests, what would your average score be?
- (A) 82
(B) 90
(C) 85
(D) 88
52. Daniel has hit the following number of home runs over the last 5 years: 25, 21, 36, 19, and 29. What is his average number of home runs per year?
- (A) 130
(B) 21
(C) 26
(D) 36

53. What is a GPA?
- (A) A measure of a student's academic performance, calculated as an average of grades
- (B) A standardized test for college admissions
- (C) A list of courses required for graduation
- (D) A type of financial aid
54. What is the average of the following data? 4, 3, 3, 2
- (A) 3
- (B) 3.5
- (C) 4
- (D) 4.5
55. Tendulkar scored 40, 86, 120 and 36 runs in four innings. and Dravid scored 54, 14, 140 and 74 runs in four innings whose average was better?
- (A) Tendulkar
- (B) Dravid
- (C) Both
- (D) None of above
56. Mary biked 95.25 kilometers in 15 days. Which shows the average distance Mary biked each day?
- (A) 6.35 kilometers
- (B) 0.63 kilometers
- (C) 65 kilometers
- (D) Not Here
57. Chelsea has played 4 games so far this season and scored on the average 3 goals per game. The average number of goals in the first 3 games was 2 goals per game. How many goals did Chelsea score in the 4th game?
- (A) 4
- (B) 5
- (C) 6
- (D) 7
58. Thomas scored an average of 25 points per game in 10 games. How many points did he score all together in those 10 games?
- (A) 25
- (B) 250
- (C) 251
- (D) 255
59. A student scored 85, 90, 95, and 100 on four tests. What is the average score?
- (A) 80
- (B) 92.5
- (C) 95
- (D) 87.5
60. A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is:
- (A) 250
- (B) 276
- (C) 280
- (D) 285
61. To find the average of a student's test scores, add the scores and divide by the number of tests. Suppose Ryan scored 85, 92, 88, and 98 on four tests. Write a numerical expression to describe Ryan's average test score.
- (A) $\frac{85+92+88+98}{4}$
- (B) $\frac{85+92+88+98}{2}$
- (C) $\frac{85+92+88+98}{5}$
- (D) $\frac{85}{2} + \frac{92}{2} + \frac{88}{2} + \frac{98}{2}$
62. What was the approximate average number of neem trees planted in all the years together?
- (A) 40830
- (B) 32025
- (C) 85240
- (D) 30485
63. You work as a bill collector. You have been asked to find the average amount of the bills you are collecting. You look at the amounts of four bills you called for today: \$82.11, \$95.33, \$121.42, and \$167.62. What is the average amount of these bills?
- (A) \$95.33
- (B) \$116.61

- (C) \$116.62
(D) \$121.42
(E) \$466.48
64. Which set of numbers has a higher average:
Set A = {10, 20, 30} or Set B = {15, 25, 35}?
- (A) Set A
(B) Set B
(C) Both have the same average
(D) Cannot be determined
65. Find the average of these numbers: 7, 3, 9
- (A) 19
(B) 15
(C) 7
(D) 6.3
66. If average of 5 terms is 30, then the sum of all of the terms= ____
- (A) 30
(B) 6
(C) 150
(D) None of above
67. You oversee an apple orchard. Today, your six employees picked apples. The number of apples each of them picked today are as follows: 325, 431, 296, 348, 329, and 401. What is the average number of apples your employees picked today?
- (A) 350
(B) 355
(C) 370
(D) 385
(E) 405
68. The mean of 100 observations is 50. If one of the observations which was 50 is replaced by 150, the resulting mean will be:
- (A) 50.5
(B) 51
(C) 51.5
(D) 52
69. I ate 30 cookies over a 5 day period. What is the average number of cookies I ate per day?
- (A) 5
(B) 6
(C) 10
(D) 15
70. Elaine earned an average of \$85 per day working for 6 days at the ice cream parlor. What was her total earnings over 6 days?
- (A) \$85
(B) \$510
(C) \$525
(D) \$425
71. In a set of three numbers, the average of first two numbers is 2, the average of last two numbers is 3, and the average of the first and the last numbers is 4. What is the average of three numbers?
- (A) 2
(B) 2.5
(C) 3
(D) 3.5
72. Average of 2,2
- (A) 1
(B) 2
(C) 4
(D) None of above
73. Jeff has four grades from tests and IXL. They are all weighted equally. If Jeff's grades are 100, 96, 96, and 100, what Jeff's current average grade?
- (A) 96
(B) 97
(C) 98
(D) 100
74. A family drove several hours to visit a theme park. Their travel progress is charted. What was the average speed in kilometers per hour?
- (A) 50
(B) 0.02
(C) 1,250
(D) 0.2

75. In a school students donated money to help age india who takes care of older people. If 10 students donated Rs 1,250 each and 20 students donated Rs 2000 each Find the average money donated by each student.
- (A) Rs 1650
(B) Rs 1550
(C) Rs 1570
(D) Rs 1750
76. Determine the average number of cars sold by all the dealers in the year 2018
- (A) 232
(B) 225
(C) 245
(D) 251
77. The masses of six children are 34.5 kilograms, 42.6 kilograms, 39.8 kilograms, 40.1 kilograms, 53.4 kilograms, and 33.8 kilograms. Find the mean mass.
- (A) 40.7 kg
(B) 40
(C) 41
(D) 50
78. On average, a bakery sells 50 loaves of bread per day. How many loaves of bread does it sell in a week?
- (A) 250
(B) 75
(C) 350
(D) 100
79. Find the mean. 120, 120, 90, 70
- (A) 120
(B) 400
(C) 200
(D) 100
80. A class had 9 students. In one test, the class average was 61. One student's paper was scored incorrectly, and the resulting score was raised 18 points. What is the corrected class average?
- (A) 70
(B) 63
(C) 72
(D) 78
81. The basketball team lost their last 6 games. They lost by a total of 48 points. Find their average number of points relative to their opponents.
- (A) -8 points per game
(B) -7 points per game
(C) -6 points per game
(D) -5 points per game
82. Which of the following data has the highest average?
- (A) 1, 2, 1, 3
(B) 1, 3, 4, 2
(C) 3, 4, 5, 4
(D) 1, 5, 1, 5
83. A museum has an average of 510 visitors on Sunday and 240 on other days. Find the average number of visitors per day in a month of 30 days beginning with a Sunday.
- (A) 285
(B) 275
84. The average age of students of a class is 15.8 years. The average age of boys in the class is 16.4 years and that of the girls is 15.4 years. The ratio of the number of boys to the number of girls in the class is:
- (A) 1: 4
(B) 2: 3
(C) 3: 4
(D) 4: 2
85. Jack scored an average of 15 points per game in his first 3 basketball games. In his 4th game, he scored 27 points. What is his new average score for the first 4 games?
- (A) 15
(B) 17
(C) 18
(D) 21

86. The average monthly salary of a group of 7 workers in a factory is Rs. 2260. If the manager's salary is added, the average salary becomes Rs. 3500 per month. What is the manager's salary per month?
- (A) Rs. 14,560
(B) Rs. 12,180
(C) Rs. 13,180
(D) Rs. 15,280
87. What is the average export made in the given time period?
- (A) 225
(B) 117
(C) 152
(D) 215
88. Virat kohli has a certain average for 10 innings. In the 11th innings he scores 85 runs thereby increases his average by 5 runs. His new average is?
- (A) 33
(B) 35
(C) 37
(D) 39
89. If I earn a 100 on one grade but make a zero on the next grade, what is my average grade?
- (A) Zero
(B) 100
(C) 50
(D) 75
90. You are in charge of coordinating fundraisers for the senior field trip at your school. Last month, the Car Was Community raised \$1,258, the Bake Sale Bunch raised \$639, the carnival crew raised \$1,723, and the Half-Marathon Handlers raised \$2,312. On average, how much money did each groups raise towards the senior field trip?
- (A) \$1,342
(B) \$1,456
(C) \$1,483
(D) \$1,521
(E) \$1,588
91. The average of the first 7 even numbers (starting with 2)
- (A) 7
(B) 8
(C) 9
(D) 6
92. The height of three basketball players is 210 cm, 220 cm and 191 cm. What is their average height?
- (A) 210
(B) 207
(C) 220
(D) 200
93. Friends work part-time at Mc Ronnies and earn \$150, \$300 and \$180 per month respectively. What is their average monthly earnings?
- (A) 176
(B) 225
(C) 210
(D) 200
94. Analyze the table and determine the difference in average height between boys and girls.
- (A) 10.2
(B) 5.6
(C) 15
(D) 20.4
95. A housekeeping business cleans vacation homes. The manager wishes to know the average number of homes that his team has cleaned during the summer months. In May, the team cleaned 130 homes. In June, the team cleaned 315 homes. In July, the team cleaned 307 homes. In August, the team cleaned 212 homes. On average, how many units did the team clean during the summer months?
- (A) 237
(B) 241
(C) 248
(D) 253
(E) 286

96. The average weight of 20 boys is 43 kgs and the average weight of 5 other boys is 42 kgs. What is the average weight of all 25 boys?
- (A) 42.8
(B) 42.5
(C) 42.6
(D) 42.7
97. The average amount earned by 110 juniors for a week was \$35, while during the same week 90 seniors averaged \$50. What were the average earnings for that week for the combined group?
- (A) \$41.75
(B) \$43.50
(C) \$47.55
(D) None of above
98. You are a ticket collector at a movie theater. A new film premieres over the weekend, for which 314 people bought tickets on Friday. On Saturday, 534 people bought tickets. On Sunday, 190 people bought tickets. What is the average number of people that bought tickets for the film over the weekend?
- (A) 192
(B) 286
(C) 328
(D) 346
(E) 390
99. Mary read six books in January, four books in February, and eight books in March. What was the average number of books read each month? ____
- (A) 18
(B) 6
(C) 14
(D) None of above
100. You are a writer. You have written several articles that are to be published in the next several months. The first article, The American Political Landscape, is 2,315 words. The second article, Red and Blue & Purple Too, is 1,747 words. The third article, The Politics of Year 2020, is 2,889 words. What is the average word count of the three articles?
- (A) 2,240
(B) 2,317
(C) 2,383
(D) 2,453
(E) 2,561
101. As a banker, you are currently reviewing several small loan applications. Your clients are applying for loans of the following amounts: \$2,440; \$3,200; \$2,570; \$1,250; and \$2,310. What is the average value of the loan amounts that you are currently reviewing?
- (A) \$2,212
(B) \$2,276
(C) \$2,321
(D) \$2,354
(E) \$2,399
102. Average of five numbers is 27. If one number is excluded the average becomes 25.
- (A) 23
(B) 32
(C) 35
(D) 24
103. Average of all the odd numbers on a dice is ____
- (A) 2
(B) 3
(C) 4
(D) None of above
104. The bar graph provided gives the sales of books (in 1000s) from six branches of a publishing company during two consecutive years 2000 and 2001. Answer the questions based on the graph: 1) What is the average sale of all the branches (in 1000s) for the year 2000?
- (A) 73
(B) 80
(C) 83
(D) 88

- 105.** You are taking a history course. The only grades in the course are five equally weighted exams, for which you earned the following grades: 99, 81, 75, 95, and 90. What is the average grade that you received on these five exams?
- (A) 78
(B) 82
(C) 88
(D) 94
(E) 74
- 106.** Find the mean of the given data 21.5 cm, 63.7 cm, 18.9 cm, 34.1 cm, 75.6 cm
- (A) 44 cm
(B) 43 cm
(C) 42.76 cm
(D) 42.76
- 107.** The average monthly income of a family is Rs.3000. What is the total income over 12 months?
- (A) Rs.24,000
(B) Rs.3,000
(C) Rs.15,000
(D) Rs.36,000
- 108.** Find the average of 69 & 71
- (A) 70.5
(B) 70
(C) 69.5
(D) None of above
- 109.** In the first round of the playoffs, Raheim's points are listed below. How many points per game is he averaging in the playoffs? 17, 24, 19, 17, 14
- (A) 90
(B) 91
(C) 17.2
(D) 18.2
- 110.** You work in a coffee shop. Today, you served 149 drinks. Your coworkers also served drinks today. Jason served 120 drinks. Marie served 87 drinks, and Courtney served 204 drinks. On average, how many drinks did you and your coworkers each serve?
- (A) 135
(B) 140
(C) 150
(D) 155
(E) 170
- 111.** Find the average of 3, 4, 5, 6, 7
- (A) 4
(B) 5
(C) 6
(D) 7
- 112.** What is the arithmetic mean of 2, 10, 6, 4, 4, 6, 4, 1, 7, 8, 2, 2, 9, 5, 3, 7, 3, 2, 8, 7
- (A) 100
(B) 2
(C) 20
(D) 5
- 113.** Quadrat 1 has 10 meerkats, quadrat 2 has 8 meerkats. What is the average number per quadrat?
- (A) 18
(B) 6
(C) 9
(D) 10
- 114.** Sara's teacher dropped one of her four test scores. Her old average of the 4 test scores was 69.5 % Her new average is 85%. Which test score did she drop?
- (A) 85
(B) 92
(C) 78
(D) 23
- 115.** The cricket player scores 13, 0, 19, 17 and 6 runs in different matches. Find his average score.
- (A) 11 Runs
(B) 12 Runs
(C) 13 Runs
(D) 14 Runs

116. What is the average number of students in each class if there are 250 students in 10 classes?
(A) 240
(B) 25
117. What is the average of first five multiples of 5?
(A) 25
(B) 75
(C) 15
(D) 30
118. The average of 18 observations was calculated and it was 124. Later on it was discovered that two observations 46 and 82 were incorrect. The correct values are 64 and 28. The correct average of 18 observations is
(A) 123
(B) 137
(C) 121
(D) 122
119. What is the approximate average height of the Douglas Fir trees sampled in this chart?
(A) 100 feet
(B) 150 feet
(C) 200 feet
(D) 225 feet
(E) 250 feet
120. Which set of numbers has a higher average: Set A = {3, 6, 9} or Set B = {4, 5, 6}?
(A) Set A
(B) Set B
(C) Both have the same average
(D) Cannot be determined
121. A scientist records the growth of a plant over 5 weeks, measuring heights of 12 cm, 15 cm, 13 cm, 14 cm, and 11 cm. What is the average weekly growth?
(A) 13 cm
(B) 12.5 cm
(C) 13.5 cm
(D) 14 cm
122. Jen has \$10, Connie has \$15, and Elsa has \$2. What is the average amount of money each person has?
(A) 9
(B) 13.5
(C) 27
(D) None of above
123. The average of 10 numbers is calculated as 15. It is discovered later on that while calculating the average, one number namely 36 was wrongly read as 26. The correct average is?
(A) 12.4
(B) 14
(C) 16
(D) 18.6
124. Over three days the average temperature was 82 degrees. After the fourth day, the average temp for the four days went up to 84 degrees. What was the temperature on the fourth day?
(A) -14 degrees
(B) 82 degrees
(C) 90 degrees
(D) 84 degrees
125. As a professional video gamer, you practice often. On Monday, you played 48 matches. On Tuesday, you played 54 matches. On Wednesday, you played 67 matches. On Thursday, you played 35 matches. What is the average number of matches you played over the four days of practice?
(A) 58
(B) 67
(C) 51
(D) 45
(E) 32
126. The average of 13 numbers is 60. Average of the first 7 of them is 57 and that of the last 7 is 61. Find the 8th number?
(A) 46
(B) 32
(C) 68
(D) 51

127. A biologist records the number of leaves on a plant over four weeks: 15, 18, 20, and 17. What is the average number of leaves per week?
- (A) 17 leaves
(B) 17.5 leaves
(C) 18 leaves
(D) 16.5 leaves
128. The average of 5 numbers is 10. The average of the first three numbers is 6. What is the average of the last two numbers?
- (A) 20
(B) 16
(C) 8
(D) 12
129. Average of 1.1, 2.2 and 3.3 is ____
- (A) 4.4
(B) 2.2
(C) 2.1
(D) 1.5
130. A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?
- (A) 3991
(B) 4991
(C) 5991
(D) 6991
131. A basketball team scored 43, 55, 41 and 37 points in their first four matches. Determine the mean number of points scored for the first four matches and hence calculate What score will the team need to shoot in the next match so that they maintain the same mean score?
- (A) 52
(B) 44
(C) 35
(D) 27
132. Find the average of 12, 15, and 18
- (A) 12
(B) 15
(C) 18
(D) 20
133. On the semester final, Joe scored 85, Jill scored 89, and Bill scored a 99. What was the average score for these students? ____
- (A) 91
(B) 273
134. A cricketer has scored 58, 54, and 64 points in the first three innings. He wants his average score for the first four innings to be a 61. What does he need to score in the 4th inning?
- (A) 72
(B) 58
(C) 68
(D) 89
135. The average of 18, 24, 30, 36, and 42 is-
- (A) 30
(B) 32
(C) 33
(D) 34
136. Jenny read 12 pages on Monday, 25 pages on Tuesday and a couple of pages on Wednesday. On the average, she read 23 pages per day during these 3 days. How many pages did she read on Wednesday?
- (A) 25
(B) 20
(C) 30
(D) 32
137. Morgan and Jamal work at a balloon shop. They fill helium balloons for birthday parties. On Monday, they filled 122 balloons. Tuesday, they filled 153, and on Wednesday, they filled 121. What was the average number of balloons they filled each day?
- (A) 122 balloons
(B) 132 balloons
(C) 121 balloons
(D) 125 balloons

138. In the first round of the playoffs, Ben Simmons points (in each game) was listed below. How many points per game is he averaging in the playoffs? 17, 24, 19, 17, 14
- (A) 16.8
(B) 17.8
(C) 17
(D) 18.2
139. On a seven-day cruise, passengers and crew members ate 2,550 fresh eggs. What was the average of eggs eaten each day?
- (A) 365 eggs
(B) 360 eggs
(C) 364 eggs
(D) 354 eggs
140. If the average of certain data is 46.3 and a new data point with the value of 30 is added to the data, then the new average ____?
- (A) Will be the same
(B) Will be higher
(C) Will be lower
(D) Will be 30
141. How do you find the average of two numbers?
- (A) Add them up and multiply by 2
(B) Add them up and subtract by 2
(C) Add them up and divide by 2
(D) Add them up and add 2 more
142. The weights of three children is 34.2 Kg, 36.8 Kg and 40.9 Kg. Find the average weight
- (A) 37.0 Kg
(B) 33.3 Kg
(C) 37.3 Kg
(D) 40.2 Kg
143. The formula of average is ____
- (A) Difference of quantities divided by no. of quantities
(B) Product of quantities divided by no. of quantities
(C) Sum of quantities divided by no. of quantities
(D) None of the above
144. You own a jewelry company. The number of pieces made by each of your five employees last week are as follows: 18, 23, 22, 19, and 23. On average, how many pieces of jewelry did your employees make?
- (A) 19
(B) 21
(C) 27
(D) 32
(E) 38
145. The average age of a group of 12 students is 20 years. If 4 more students join the group, the average age increases by 1 year. The average age of the new students is ____
- (A) 24
(B) 26
(C) 28
(D) 22
146. Carlos earned \$23, \$29, \$25, \$16, and \$17 in tips at each of the tables he served at a restaurant. What is the mean of the tips he received?
- (A) 23
(B) 110
(C) 22
(D) 25
147. The last four times that Jimmy filled up his tank of gas, the average price per gallon of gas was \$3.05. If the average price stays drops to \$2.50 the next two times that Jimmy fills up his tank, then what would the average price per gallon for all of the trips be?
- (A) \$2.83
(B) \$2.78
(C) \$2.87
(D) \$3.44
148. Which formula will calculate the average of data in a given range?
- (A) AVERAGE

- (B) AVERAGE
(C) AVERAGEIF
(D) AVERAGING
- 149.** Hannah has scored the following number of points in the last five games: 2, 57, 38, 42, 6. What is her average over those games?
(A) 29
(B) 38
(C) 50
(D) 145
- 150.** Paulo got these markers in three tests: 72, 80 and 82. He had one more test to sit. He wanted an average of 80 for the four tests. What mark must he get in the fourth test?
(A) 78
(B) 80
(C) 84
(D) 86
- 151.** Calculate the average of the numbers 5, 10, 15, 20, and 25.
(A) 10
(B) 15
(C) 20
(D) 25
- 152.** What was the average rate of change in the population from 1900 to 1990?
(A) 175 million people/year
(B) 1.94 million people/year
(C) 2.13 million people/year
(D) -1 million people/year
- 153.** In a certain school, course grades range from 0 to 100. Adrianna took 4 courses and her average course grade was 90. Roberto took 5 courses. If both students have the same sum of course grades, what was Roberto's average?
(A) 72
(B) 80
(C) 90
(D) 92
- 154.** Average-is the sum of all addends divided by the number of addends.
(A) True
(B) False
(C) I don't know
(D) Maybe
- 155.** The chart shows the results of a customer satisfaction survey. What was the average mark scored by Motorola?
(A) 7
(B) 8
(C) 5
(D) 6.5
- 156.** You are an Internet service provider. Your company offers a number of different Internet service packages. The Gold Package costs \$155 per month. The Diamond Package costs \$160 per month. The Economy Package costs \$95 per month. The Premium Package costs \$175 per month. Finally, the all-inclusive Platinum Package costs \$200 per month. What is the average cost per month of the packages you offer?
(A) \$123
(B) \$157
(C) \$178
(D) \$196
(E) \$230
- 157.** Peter played an online Pinball game. The first time he got a score of 25,000 points. He scored 125,000 points the second time and 30,000 the third time he played. What was his average score per game?
(A) 50,000
(B) 60,000
(C) 75,000
(D) 80,000
- 158.** A teacher is teaching two AP Statistics classes. On the final exam, the 25 students in the first class averages 87, while the 30 students in the second class averages 98. If the teacher combines the classes, what will the average final exam score be?

- (A) 92
(B) 92.5
(C) 93
(D) 94.5
(E) 95
- 159.** You work at a submarine sandwich shop. On Monday, you served 166 customers. On Tuesday, you served 132 customers. On Wednesday, you served 88 customers. On Thursday, you served 196 customers. To the nearest whole number, how many customers, on average, did you serve?
- (A) 141
(B) 146
(C) 149
(D) 153
(E) 157
- 160.** What was the difference in average price between commodity A and B from April to August?
- (A) 86
(B) 75
(C) 95
(D) 85
- 161.** The average of 5 quantities is 6. The average of 3 of those 5 quantities is 8. What is the average of the remaining two quantities?
- (A) 5
(B) 2
(C) 3
(D) 1
- 162.** You are a mathematics professor. You are currently teaching five courses at a university. After giving the final exams to each of your courses, you find that the average grade in each course is as follows: 72, 81, 75, 63, and 80. What is the total average of the average grades from the five courses you are teaching at the university?
- (A) 45.7
(B) 56.2
(C) 74.2
(D) 76.8
(E) 81.5
- 163.** There are an average of 20 kids in each class. There are 36 classes in the school. Using the average find about how many kids are in the school.
- (A) 720
(B) 750
(C) 613
(D) 553
(E) 837
- 164.** Find the average of 73 & 66
- (A) 71
(B) 62.5
(C) 69.5
(D) None of above
- 165.** What does "mean" mean?
- (A) Average
(B) Middle
(C) Repeats the most
(D) Variation
- 166.** You are a biologist working on an experiment. You are testing several compounds that are meant to assist in the growth of tomato plants. Compound A results in a 148 cm plant. Compound B results in a 231 cm plant. Compound C results in a 125 cm plant. Compound D results in a 235 cm plant. Compound E results in a 196 cm plant. On average, what is the height of the plants that these compounds resulted in?
- (A) 187
(B) 189
(C) 191
(D) 195
(E) 202
- 167.** If the arithmetic mean of seventy five numbers is calculated, it is 35. If each number is increased by 5, then mean of new number is:
- (A) 30
(B) 40

- (C) 37
(D) NOTA
168. Amy's current grades for her assignments in math class are 85, 90, 95, and 80. What grade does she have to earn on her next assignment to attain an average of 90?
- (A) 88
(B) 90
(C) 95
(D) 100
169. The recent electric bills for the Rafael family were as follows: August \$187.55; September \$197.34; October \$200.44; and November \$256.88. Find the average monthly expenditures.
- (A) \$842.21
(B) \$210.55
(C) \$195.11
(D) \$168.44
170. The 5th grade class was in charge of the dinosaur exhibit at the school science fair. Jason brought 21 dinosaur models, Lisa brought 13 dinosaur models, Sara brought 6 dinosaur models, and Jim brought 24 dinosaur models. What is the average number of dinosaur models that each student brought to the fair?
- (A) 24
(B) 16
(C) 6
(D) 4
171. The average temperature, in degrees Fahrenheit, in the month of July in Clark City is 4 times the average temperature in the month of February. If the average temperature in July was 82 degrees, which of the following equations could be used to determine the average temperature in February (t)?
- (A) $T + 4 = \frac{82}{4}$
(B) $4t = 82$
(C) $\frac{t}{4}$
(D) $4t = 21$
172. The scores of a student in an exam are: 70 marks in Hindi, 80 marks in E.V.S, 90 marks in English and his Mathematics mark is 1 mark more than the average marks of the other 3 subjects. What is the marks in Mathematics of this student?
- (A) 81
(B) 86
(C) 83
(D) 82
173. From January to September, the mean number of car accidents per month was 630. From October to December, the mean was 810 accidents per month. What was the mean number of car accidents per month for the whole year?
- (A) 700
(B) 675
(C) 760
(D) 812
174. Why would you use a weighted average instead of a traditional average calculation?
- (A) Because you have a lot of numbers
(B) Because the value you are trying to calculate is made up of categories which each have different weights.
175. The average temperature on Wednesday, Thursday and Friday was 25° . The average temperature on Thursday, Friday and Saturday was 24° . If the temperature on Saturday was 27° , what was the temperature on Wednesday?
- (A) 30°
(B) 27°
(C) 21°
(D) 24°
176. A company produces three products: product A, product B, and product C. The profit margins for these products are 10%, 15%, and 20% respectively. If the company sells 100 units of product A, 200 units of product B, and 150 units of product C, what is the weighted average profit margin?
- (A) 12.5%

- (B) 17.5%
(C) 22.5%
(D) 15.56%
- 177.** A community is concerned about the high volume of commuter traffic in front of its elementary school between 8:30 A.M. and 9:00 A.M. The numbers of cars that passed without dropping off a student during that half hour on consecutive school days are: 65, 72, 83, 96, 53, 76, 54, 70, 75, 48, 56. What is the mean (average) of these numbers of cars?
(A) 68
(B) 70
(C) 76
(D) 79
(E) 748
- 178.** The average marks scored by a class of 42 students is 65. If $\frac{1}{3}$ rd of the students scored at an average of 75 marks, what is the average of remaining students?
(A) 55
(B) 50
(C) 60
(D) 57
- 179.** Jasmine has spent \$50, \$72, \$22 and \$15 each of the last 4 weeks. If she wants to make sure she spends an average of \$40 a week or less, what is the most Jasmine can spend next week?
(A) \$1
(B) \$21
(C) \$31
(D) \$41
- 180.** Four friends went shopping for school clothes. Kim bought 5 shirts, Jill bought 4 shirts, Leslie bought 6 shirts, and Crystal bought only 1 shirt. Which answer choice represents the mean of the shirts purchased?
(A) 3
(B) 2
(C) 6
(D) 4
- 181.** If the average of four consecutive odd numbers is 16, find the smallest of these numbers?
(A) 5
(B) 7
(C) 13
(D) 11
- 182.** There are 6156 students in a school district. If there are 27 schools, how many students are each school, on average?
(A) 219 students
(B) 228 students
(C) 22 students
(D) 23 students
- 183.** The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?
(A) 76 kg
(B) 76.5 kg
(C) Inadequate data
(D) 85 kg
- 184.** You collect trading cards. Your collection of trading cards has grown to be contained in several boxes. You count the number of cards currently contained in each box: 1,337, 1,245, 1,501, and 601. What is the average number of cards in each of these boxes?
(A) 684
(B) 759
(C) 905
(D) 1,101
(E) 1,171
- 185.** In a class of 20 students, the average height is 150 cm. What is the total height of all the students?
(A) 3000 cm
(B) 1800 cm
(C) 2500 cm
(D) 2000 cm

- 186.** What is the mean score of the 10 students in the table above?
(A) 22.5
(B) 75
(C) 77
(D) 85
- 187.** Average of first 3 multiples in the table of 5.
(A) 5
(B) 10
(C) 15
(D) None of above
- 188.** The average of 4 numbers is 28. If the number 40 is removed, what is the average of the remaining 3 numbers?
(A) 25
(B) 23
(C) 24
(D) 26
- 189.** Average of 15 numbers is zero. at most how many numbers may be greater than zero.
(A) 9
(B) 14
(C) 15
(D) 0
- 190.** A scientist measures the growth of a plant every day: 10 cm, 20 cm, 40 cm, 80 cm, and 160 cm. What is the average growth per day?
(A) 50 cm
(B) 62 cm
(C) 82 cm
(D) 102 cm
- 191.** What is the average percentage of marks obtained by all the students together in English? (rounded to the nearest integer)
(A) 61
(B) 63
(C) 65
(D) 68
- 192.** What is the average water level of River-A in all the four months together?
(A) 224.50 m
(B) 212.25 m
(C) 210.75 m
(D) 222.25 m
- 193.** The mean (average) of the first ten natural numbers is
(A) 5.5
(B) 5
(C) 4
(D) 4.5
- 194.** At Chocolatine, three friends spent \$12, \$10.60 and \$8. What was the average amount spent?
(A) \$10
(B) \$11
(C) \$10.50
(D) \$10.20
- 195.** Peter bought 4 toys. The prices of the first 3 toys he bought are shown in the table below. The average price he paid for the 4 toys was \$25 per toy. How much did he pay for the 4th toy?
(A) \$20
(B) \$30
(C) \$35
(D) \$25
- 196.** You are a landscaper. You have been commissioned to landscape four public parks in a developing city. In the first park, you planted 258 plants and trees. In the second park, you planted 303 plants and trees. In the third park, you planted 198 plants and trees. In the fourth park, you planted 473 plants and trees. On average, how many plants and trees did you plant in the four parks?
(A) 287
(B) 308
(C) 342
(D) 390
(E) 424

197. If the average rainfall for January is 3 inches and for February is 4 inches, what is the average for these two months?
- (A) 3.5 inches
 - (B) 6 inches
 - (C) 5 inches
 - (D) 2 inches
198. Using the information in the graph, what is the average speed Josh's car traveled to get home?
- (A) 8 km/hour
 - (B) 160 km/hour
 - (C) 16 km/hour
 - (D) 40 km/hour
199. Find the average of the numbers 13, 26, 39, and 52.
- (A) 26
 - (B) 32.5
 - (C) 39
 - (D) 45.5
200. You work as an accountant. You manage several different accounts for a particular client. The client has two checking accounts, one with \$14,508 and another with \$13,420. He has a savings account with \$48,744 and an investment account with \$23,568. What is the average value, in dollars, of these accounts?
- (A) \$12,400
 - (B) \$15,600
 - (C) \$25,060
 - (D) \$26,720
 - (E) \$28,020
201. Average of five numbers is 20. If each number is multiplied by 2, what will be the new average?
- (A) 30
 - (B) 40
202. Alexa went go-cart racing. Her lap times were 1.63 seconds, 2.03 seconds, 1.78 seconds, 2.13 seconds, and 2.07 seconds. What was the average time of a lap for her?
- (A) Between 9 and 9.5 seconds
 - (B) Between 9.5 and 10 seconds
 - (C) Between 1 and 1.5 seconds
 - (D) Between 1.5 and 2 seconds
203. Calculate the average of the numbers 8, 16, 24, 32, and 40.
- (A) 16
 - (B) 24
 - (C) 32
 - (D) 40
204. What was the average (mean) number of goals scored per game? Give your answer to one decimal point.
- (A) 2.2
 - (B) 2.4
 - (C) 2.6
 - (D) 2.8
205. Find the average of the numbers 7, 14, 21, and 28.
- (A) 14
 - (B) 17.5
 - (C) 21
 - (D) 24.5
206. Dr. Dre is a dentist. He needs to report on the average (Mean) number of cavities that his patients have. 1, 0, 1, 5, 0, 3, 4. What is the average number of cavities?
- (A) 14
 - (B) 2
 - (C) 7
 - (D) 1
207. I ran a total of 55 miles in 11 days? What is the average number of miles I ran per day?
- (A) 5
 - (B) 10
 - (C) 11
 - (D) 15

208. What is the average of the numbers 6, 12, 18, 24, and 30?
(A) 12
(B) 18
(C) 24
(D) 30
209. If the average (arithmetic mean) of 24 consecutive odd integers is 48, what is the median of the 24 numbers?
(A) 36
(B) 47
(C) 48
(D) 49
(E) 72
210. A graduating class has 300 women and 250 men. The women's ages average to 27 and the men's ages average to 29. What is the average age of the class?
(A) 28
(B) 27.5
(C) 27.9
(D) Cannot be determined
211. You work in a grocery store. After receiving a shipment, you unload crates of products onto the shelves. On Aisle 1, you unload 96 products. On Aisle 2, you unload 146 products. On Aisle 3, you unload 124 products. On Aisle 4, you unload 190 products. How many products did you unload onto these aisles, on average?
(A) 121
(B) 128
(C) 134
(D) 137
(E) 139
212. Average of 15 persons in a group is 20 years. After joining one person to the group, the average age of the group is increased by 5 years. Find the age of new person.
(A) 100 years
(B) 120 years
(C) 50 years
(D) 135 years
213. Find the average for this data: 5, 8, 2
(A) 5
(B) 6
(C) 4
(D) 15
214. Peter received the following four grades on his math tests: 86, 90, 88, and 96. What was Peter's average for the four tests?
(A) 89
(B) 91
(C) 88
(D) 90
215. If the average score of a class is 75 and there are 20 students, what is the total score of the class?
(A) 1800
(B) 1500
(C) 1400
(D) 1600
216. The arithmetic mean of the scores of a group of students in a test was 52. The brightest 20% of them secured a mean score of 80 and the dullest 25% a mean score of 31. The mean score of remaining 55% is:
(A) 45
(B) 50
(C) 51.4
(D) 54.6
217. Find the average of the following numbers: 12.25, 6.8, 10.5, 9, 13
(A) 10.125
(B) 10.31
(C) 10.42
(D) 10.33
218. The mean of 10 observations is 10. All the observations are increased by 10%. The mean of increased observations will be:
(A) 10
(B) 10.1
(C) 11
(D) 11.1

219. What is the average of the numbers 10, 20, 30, 40, and 50?
(A) 25
(B) 30
(C) 35
(D) 40
220. In which water temperature did the goldfish have an average breathing rate of 28.75? (hint: Calculate mean for each temperature!)
(A) 8 Celsius
(B) 14 Celsius
(C) 2 Celsius
(D) 20 Celsius
221. Towards the end of season, a netballer had played 14 matches and had an average of 16.5 goals per game. In the final two matches of the season she threw 21 goals and 24 goals. Find the netballer's new average.
(A) 18.46
(B) 11.37
(C) 19.01
(D) 17.25
222. DJ scored a total of 344 points on his last four tests combined. What was his average test score?
(A) 94
(B) 89
(C) 86
(D) 68.8
223. What is another word for AVERAGE?
(A) Mode
(B) Median
(C) Mean
(D) Not nice
224. The average height of a family of five is 150 cm. If the heights of 4 family members is 153, 150, 151 and 152, find the height of the fifth member.
(A) 143
(B) 144
(C) 145
(D) 146
225. The average amount of federal student loan debt is:
(A) \$26,312
(B) \$53,000
(C) \$15,295
(D) \$37,853
226. Berenice's chickens weighed 2.54 pounds, 3.6 pounds, and 3.502 pounds. What was the average weight of a chicken rounded to the nearest hundredth?
(A) 3.214 pounds
(B) 3.21 pounds
(C) 3 pounds
(D) 3.2 pounds
227. I have 3 grades for math: 100, 50, 90. What is my average grade?
(A) 50
(B) 70
(C) 80
(D) 90
228. Find the average of 7, 13, 12, 18, 10
(A) 7
(B) 13
(C) 12
(D) 10
229. Bobby scored 80%, 78%, and 82% on 3 tests. What is his average score?
(A) 78%
(B) 79%
(C) 80%
(D) 81%
230. A scientist records the time it takes for a leaf to fall from a tree in four trials: 2 seconds, 3 seconds, 2 seconds, and 1 second. What is the average fall time?
(A) 1.5 seconds
(B) 2 seconds
(C) 2.5 seconds
(D) 3 seconds

1.4.11 Missing Data Interpretation

1. Find the missing number in the sequence: 1, 4, 9, ____, 25
(A) 20
(B) 16
(C) 12
(D) 36
2. What is the missing number in the rate table?
(A) 21
(B) 24
(C) 27
(D) 25
3. How do you handle missing or corrupted data in a dataset?
(A) Drop missing rows or columns
(B) Replace missing values with mean/median/mode
(C) Assign a unique category to missing values
(D) All of the above
4. Find the missing number in the series: 16, 25, ____, 49, 64.
(A) 18
(B) 36
(C) 81
(D) 9
5. Which of the following is a common technique for handling missing data?
(A) Clustering
(B) Normalization
(C) Imputation
(D) Data augmentation
6. Which number is missing? 12,793; ____, 12,795; 12,796
(A) 12,792
(B) 12,794
(C) 12,797
(D) 12,749
7. What is one way to handle missing data during the cleaning process?
(A) Deciding what to do about missing data.
(B) Ignoring all data.
(C) Adding more outliers.
(D) Changing the experiment.
8. ARITHMETIC MEAN OF ITEMS: 10, 15, X, 20, 30 IS 20. FIND OUT THE MISSING ITEM.
(A) 10
(B) 15
(C) 5
(D) 25
9. Find the missing number in the series: 27, 125, ?, 729, 1331.
(A) 343
(B) 216
(C) 1000
(D) 512

1.4.12 Comparative Data

1. Reese rides her bike 10 miles in 5 hours. Avery rides her bike 15 miles in 5 hours. Which girl rides her bike faster?
(A) Reese
(B) Avery
2. Did the shop receive more or fewer orders in September than it did in March?
(A) More
(B) Fewer
3. How does time spent on games change when one switches from using a smartphone to using a tablet?
(A) Increases from 35% to 57%
(B) Decreases from 57% to 35%

- (C) Remains the same at 35%
(D) Increases from 20% to 57%
4. How much more does it rain in July than in January?
(A) 3
(B) 4
(C) 5
(D) None of above
5. How many more potatoes were grown in 2011 than in 2009?
(A) 5
(B) 10
(C) 15
(D) 20
6. There are 328 students in Kay's school. There are 346 students at John's school. Whose school has more students?
(A) Kay's school
(B) John's school
7. There are ____ more students who like English than Math.
(A) 1
(B) 2
(C) 3
(D) 4
8. In which of the following months did the eighth graders raise more money than the seventh graders?
(A) April
(B) May
(C) August
(D) September
9. '5 is 3 more than 2' is an additive comparison.
(A) True
(B) False
10. '12 times greater than 11' is a(n):
(A) Additive comparison
(B) Multiplicative Comparison
11. How many more people have purple for a favourite colour than red?
(A) 3
(B) 5
(C) 7
(D) 9

1.4.13 Percentage Data

1. What is 150% of 158?
(A) 237
(B) 2.37
(C) 23.7
(D) 2370
2. What is 100% of 600
(A) 600
(B) 60
(C) 6
(D) 6000
3. What does the word percent mean?
(A) Out of 100
(B) Out of 10
(C) Out of 1,000
(D) None of above
4. Greg took a test. Out of 12 questions, he answered only 9 correctly. What percent of the questions did he score correctly?
(A) 75%
(B) 50%
(C) 80%
(D) 85%
5. What is 15% of 2500
(A) 375
(B) 250
(C) 125
(D) 305

6. What is 12/100 as a percentage?
(A) 24 %
(B) 12 %
(C) 50 %
(D) 99 %
7. What is the value of 150% of 120?
(A) \$60
(B) \$150
(C) \$180
(D) \$200
8. What is 45% of 50?
(A) 22.5
(B) 21.5
(C) 20.5
(D) 4.5
9. Out of 200 students, 150 passed the exam. What is the percentage of students who passed?
(A) 75%
(B) 50%
(C) 60%
(D) 90%
10. What is 5% of 30?
(A) 3
(B) 5
(C) 4.5
(D) 1.5
11. Change 18% to a decimal
(A) 18
(B) .18
(C) .018
(D) .18%
12. What is 190% of 64?
(A) 121
(B) 121.6
(C) 84
(D) 83
13. What is 0.9999 as a percentage?
(A) 9%
(B) 90%
(C) 99.99%
(D) 99.99999999%
14. What is 10% of 85?
(A) 8.5
(B) 10
(C) 12
(D) 8
15. Find 14% of 204
(A) 28.56
(B) 2.856
(C) .2856
(D) 285.6
16. A percent is a shortcut way to write a fraction that has ____ as a denominator.
(A) 10
(B) 100
(C) 1,000
(D) 10,000
17. Convert $\frac{13}{20}$
(A) 13%
(B) 60%
(C) 65%
(D) 0.13
18. Another way of saying 50%
(A) Half
(B) A quarter
(C) 3 quarters
(D) Just under
19. What percentage is the same as 0.75
(A) $\frac{3}{4}$
(B) 75%
(C) 7.5%
(D) 1%

20. Compute for the percentage: 10% of $80 = \underline{\hspace{1cm}}$
- (A) 5
(B) 6
(C) 7
(D) 8
21. Click on the equivalent percentage of $15/20$.
- (A) 81%
(B) 14%
(C) 50%
(D) 75%
22. The 6th graders at SFMS are going to Stars and Strikes. 60% of the 120 students want to go bowling first. How many students want to go bowling first?
- (A) 72 students
(B) 27 students
(C) 54 students
(D) 69 students
23. What is 25% of 10?
- (A) 2.5
(B) 5
(C) 3
(D) 2
24. Overall percentage of respondents using the Professional Standards.
- (A) 65% of respondents use the Professional Standards.
(B) 73% of respondents use the Professional Standards.
(C) 80% of respondents use the Professional Standards.
(D) 55% of respondents use the Professional Standards.
25. If you got $15/20$ in your science test what was your percentage?
- (A) 15
(B) 5
(C) 25
(D) 75
26. Calculate 5% of 30m
- (A) 3
(B) 1.5 m
(C) 3m
(D) 0.15 m
27. Of the 160 students in the Amazing School of Wizarding, 88 of them are boys. What percent are boys?
- (A) 45%
(B) 55%
(C) 80%
(D) 88%
28. Madelyn made 45% of her shots at a basketball game. If she attempted 20 shots, how many did she actually make?
- (A) 9
(B) 10
(C) 0.9
(D) 90
29. What is 24% of 135?
- (A) 28.6
(B) 30.8
(C) 32.4
(D) 32.9
30. Which is the decimal for 3.5% ?
- (A) 3.5
(B) 0.35
(C) 0.0035
(D) 0.035
31. Find 2% of 1250
- (A) 50
(B) 75
(C) 25
(D) 12.5
32. Find 25% of 80 kg
- (A) 40 kg
(B) 10 kg
(C) 8 kg
(D) 20 kg

33. Shirley spelled 12 of her 15 spelling words correctly on the test. What percent grade did Shirley get on the test?
- (A) 40%
(B) 80%
(C) 50%
(D) 60%
34. What is 30% of 90?
- (A) 9
(B) 18
(C) 270
(D) 27
35. Using a percent proportion, what is the denominator of the percent as a fraction?
- (A) 200
(B) 100
(C) The part
(D) The missing number
36. A school band consists of 45 boys and 50 girls. Of the total number of boys, 18 play the drums. What percent of the boys in the band play the drums?
- (A) 40%
(B) 36%
(C) 10%
(D) 9%
37. What is 6% of 80?
- (A) 5
(B) 4.8
(C) 48
(D) 13
38. What percent of 145 is 29?
- (A) 2%
(B) 3%
(C) 18%
(D) 20%
39. What is 10% of 6.3?
- (A) 0.63
(B) 63
(C) 6.03
(D) 0.603
40. Change 25% to a decimal
- (A) .25
(B) .2
(C) 2.5
(D) .025
41. Twenty-four out of forty pies at a bake sale are coconut pies. What percent of the pies is coconut?
- (A) 24%
(B) 40%
(C) 60%
(D) 75%
42. Which English sentence matches the expression: $n = 5\% \times 6$
- (A) What number is 5 percent of 6?
(B) What percent of 5 percent is 6?
(C) What number is 5 of 6 percent?
(D) What number is 5 percent of 6 percent?
(E) What number of 5 percent is 6?
43. What percent is shaded?
- (A) 7.1%
(B) 20%
(C) $\frac{7}{10}$
(D) 71%
44. Compute for the percentage: 2% of 60 = ____
- (A) 1.2
(B) 0.12
(C) 12
(D) 120
45. What is 150% of 88?
- (A) 132
(B) 1.32
(C) 13.2
(D) 1320

46. What percent of 200 is 290?
(A) 145
(B) 68
(C) 58
(D) 74
47. Find 12.5% of 1000 cakes
(A) 1250
(B) 125
(C) 250
(D) 1025
48. How would you say 100% in other words?
(A) One whole
(B) One quarter
(C) Three quarters
(D) One half
49. What is 38% of 560?
(A) 21.28
(B) 212.8
(C) 213
(D) 224
50. To get from a percent (such as 25%), to an equivalent decimal (such as .25) you:
(A) Multiply By 100
(B) Divide by 100
(C) Multiply by 10
(D) Divide by 10
51. What is 17% of 600?
(A) 78
(B) 90
(C) 102
(D) None of above
52. What proportion of the US population now accept the causal link between global warming and human activities?
(A) $\frac{2}{3}$
(B) $\frac{1}{5}$
(C) $\frac{4}{9}$
(D) $\frac{1}{2}$
53. What is 22% of 250?
(A) 45
(B) 50
(C) 55
(D) 60
54. Percentage is out of ____
(A) 1
(B) 10
(C) 100
(D) 1000
55. (exactly) three quarters
(A) 25%
(B) 75%
(C) 50%
(D) 70%
56. What is 5% of 50
(A) 5
(B) 2.5
(C) 2
(D) 3
57. Convert the percent to a decimal: 25%
(A) 0.255
(B) 0.30
(C) 0.25
(D) 1.25
58. A percent is a number out of ____
(A) 1
(B) 50
(C) 100
(D) Itself
59. What is 25% of 500 sweets?
(A) 200
(B) 150
(C) 175
(D) 125

60. A company has 40 executives and 120 customer service representatives. If these are the only employees, what percentage of the employees are executives?
- (A) 20%
(B) 25%
(C) 33%
(D) 40%
(E) 80%
61. What is 6% of 78
- (A) 4.72
(B) 3.912
(C) 4.68
(D) 78.6%
62. What fraction is equivalent to 25%?
- (A) $\frac{1}{3}$
(B) $\frac{1}{4}$
(C) $\frac{1}{5}$
(D) $\frac{1}{8}$
63. Percentages are always out of ____ % and percentages are used in the same way as decimals and fractions.
- (A) 50
(B) 100
(C) 200
(D) 1000
64. If 75% is 27, what's 100%?
- (A) 9
(B) 54
(C) 18
(D) 36
65. Find 75% of 1200
- (A) 300
(B) 600
(C) 900
(D) 1000
66. Change 31.1% to a decimal
- (A) .0311
(B) 31.1
(C) .311
(D) 3.11
67. Change 6.75% to a decimal.
- (A) 67.5
(B) .675
(C) 675
(D) .0675
68. What is 100% of \$900,000?
- (A) 90
(B) 900
(C) 9000
(D) 900,000
69. Tom rolled a die 20 times, he got 6 twice. What was the % of times that he scored six?
- (A) 10
(B) 20
(C) 30
(D) 33
70. On last week's maths test Carol had 21 correct out of 25 problems. What percent grade did she receive?
- (A) 42
(B) 80
(C) 84
(D) 92
71. Joan has read 60% of the library book that she checked out on Friday. Which of the following shows a value equivalent to 60%?
- (A) 0.006
(B) 60
(C) $\frac{1}{60}$
(D) $\frac{3}{5}$
72. Express the $\frac{25}{500}$
- (A) 5%
(B) 25%
(C) 500%
(D) 0.5%

73. What percentage of Tom's pets are dogs if 3 out of 5 pets are dogs?
(A) 60%
(B) 5%
(C) 6%
(D) 30%
74. There are 27 Jellybeans in a jar. 10 are RED, 6 are BLUE and the rest are YELLOW. What percent of the Jellybeans are Yellow?
(A) 25.7%
(B) 40.7%
(C) 15.2%
(D) 88.2%
75. Convert 150% into a decimal number.
(A) .15
(B) 1.5
(C) 15
(D) .015
76. In 2005, what percentage of children in School A had problems with reading ability?
(A) 22%
(B) 28%
(C) 30%
(D) 35%
77. What percentage is the same as 0.4
(A) 40%
(B) 4%
(C) 4
(D) 0.4%
78. In a class of 50 children there are 28 boys. What percentage are girls?
(A) 56
(B) 28
(C) 44
(D) 22
79. If 12 out of 30 students in class are girls, what percent of the class is girls?
(A) 20
- (B) 40
(C) 60
(D) 80
80. Express 36 as a percentage of 50
(A) 82%
(B) 72%
(C) 62%
(D) 52%
81. Write 5% as a decimal
(A) 5
(B) .5
(C) .005
(D) .05
82. There are 150 people at the concert. There are 90 adults and the rest are children. What percentage of the people at the concert are children?
(A) 25%
(B) 50%
(C) 40%
(D) 35%
83. In a class of 30 kids, 3 students forgot to do their homework. What percent is that?
(A) 3%
(B) 30%
(C) 10%
(D) 28%
84. A pair of jeans is on sale for 25 % off the original price. What fraction of the original price is this saving?
(A) $\frac{1}{2}$
(B) $\frac{1}{3}$
(C) $\frac{1}{4}$
(D) $\frac{1}{5}$
85. Which option is greater than 200%?
(A) $2\frac{1}{4}$
(B) $\sqrt{2}$
(C) 1.9
(D) 4×10^{-2}

86. There are 800 visitors to a museum, 250 are men, 324 are women and the rest are children. What percentage were children?
(A) 22.6
(B) 28.25
(C) 31.25
(D) 40.4
87. Express $4/5$ as a percentage
(A) 20%
(B) 80%
(C) 40%
(D) 45%
88. Another way of saying one quarter
(A) 35%
(B) 25%
(C) 65%
(D) 90%
89. Find 70% of 400 people
(A) 280
(B) 40
(C) 350
(D) 210
90. What does per cent mean?
(A) Per decimal
(B) Per fraction
(C) Per hundred
(D) None of the above
91. What is 5% of 70?
(A) 5.5
(B) 7
(C) 3
(D) 3.5
92. Yesterday the movie theater sold a total of 180 tickets. Of these tickets, 45 tickets were sold at a discounted price. What percent of all the tickets were sold at a discounted price?
(A) 25%
(B) 20%
(C) 40%
(D) 35%
93. What is 13% of 200?
(A) 11
(B) 13
(C) 23
(D) 26
94. What percent of 130 is 91?
(A) 118
(B) 112
(C) 70
(D) 74
95. What is 60% of 350?
(A) 35
(B) 60
(C) 175
(D) 210
96. Convert 26% into a decimal number.
(A) .26
(B) .026
(C) 2.6
(D) 26
97. What percent of 52 is 13?
(A) 25%
(B) 30%
98. What is 70% of 25?
(A) 12.5
(B) 15.5
(C) 17.5
(D) 22.5
99. What is 10% of 200?
(A) 10
(B) 20
(C) 2000
(D) 15

- 100.** Identify the BASE in the following problem: 22% of 80 is 17.6
(A) 80
(B) .80
(C) .080
(D) None of above
- 101.** In the Daytona 500, out of 30 cars that started the race, 12 of them finished. What percent of the cars finished the race? To word it another way, What percent is 12 cars that finished the race out of 30 cars total that started the race?
(A) 20%
(B) 40%
(C) 60%
(D) 80%
- 102.** What percent of 56 is 75?
(A) .125
(B) 120%
(C) 133.9%
(D) 18%
- 103.** What percentage of Juniors in the survey play sports?
(A) 14/50
(B) 14/32
(C) 32/125
(D) 14/125
(E) 50/125
- 104.** A very small % (<5%)
(A) A significant majority
(B) A good proportion
(C) A large proportion
(D) An insignificant amount
- 105.** What is 10% of 87?
(A) 8.7
(B) 0.87
(C) 7
(D) 8
- 106.** What is 12% of 40?
(A) 4.2
(B) 4
(C) 4.8
(D) 5
- 107.** "a quarter" is?
(A) 35%
(B) 25%
(C) 65%
(D) 90%
- 108.** 189 out of 225 sheets of paper are white. What percent of the paper is white?
(A) 26%
(B) 29%
(C) 84%
(D) 87%
- 109.** There are 25 students performing in the holiday concert. Of the students, 11 are boys. What percent of the students are boys?
(A) 44%
(B) 48%
(C) 52%
(D) 56%
- 110.** Change 5% to a decimal
(A) 500
(B) 0.5
(C) 0.05
(D) 50
- 111.** What is 20% of 600 cars
(A) 60
(B) 30
(C) 300
(D) 120
- 112.** What is 9% of 500?
(A) 27
(B) 36
(C) 45
(D) 54

113. What is 18 percent of 36?

- (A) 6.48
- (B) 12
- (C) 29.52
- (D) 64.8

114. What is 12% of 500?

- (A) 42
- (B) 48
- (C) 54
- (D) 60

115. What is 5% of 340?

- (A) 68
- (B) 17
- (C) 34
- (D) 300

116. What is 10% of 45?

- (A) 4.5
- (B) 0.45
- (C) 4
- (D) 5

117. Convert 7.2% to a decimal.

- (A) 72
- (B) 720
- (C) 0.072
- (D) 0.0072

118. Calculate 20% of 150

- (A) 15
- (B) 20
- (C) 25
- (D) 30

119. What percent of 700 is 147?

- (A) 19%
- (B) 21%
- (C) 23%
- (D) None of above

120. What is 15% of 82?

- (A) 12.3
- (B) 123
- (C) 1.23
- (D) 15

121. Calculate the percentage increase if a price increases from \$50 to \$70.

- (A) 40%
- (B) 60%
- (C) 50%
- (D) 30%

122. What is the value of 25% of 360?

- (A) 80
- (B) 85
- (C) 90
- (D) 95

123. What percentage of the students were boys?

- (A) 20%
- (B) 25%
- (C) 40%
- (D) 50%

124. What is 30% of 45?

- (A) 10
- (B) 13.5
- (C) 15
- (D) 33.3

125. What is 5/25 as a percentage?

- (A) 5%
- (B) 25%
- (C) 20%
- (D) 5.25%

126. During the time of Indian independence what was the literacy rate?

- (A) Less than 15%
- (B) Less than 16%
- (C) Less than 18%
- (D) Less than 12%

127. What percent of 25 is 60?

- (A) 24%
- (B) 2.4
- (C) 240%
- (D) 100%

128. There are 40 people in a crew. On Tuesday,

36 of them showed up to work. What percent of the crew was present on Tuesday?

- (A) 14.4
- (B) 1111
- (C) 144
- (D) 90

1.4.14 Ranking Data

1. Aisha ranked 9th from top and 38th from the bottom in a class. How many students are there in the class?

- (A) 47
- (B) 48
- (C) 45
- (D) 46

2. Ramesh ranks 13th in the class of 33 students. There are 5 students below Suresh rank-wise. How many students are there between Ramesh and Suresh?

- (A) 12
- (B) 14
- (C) 15
- (D) 16

3. When data arranged in an ascending order of magnitude reveal that 19th, 20th 21st and 22nd observations have the same value, the rank assigned to each of these observations is

- (A) 21.5
- (B) 21
- (C) 20.5
- (D) 20

4. Riya ranked 8th from the top & 26th from the bottom in a class. How many students are there in the class?

- (A) 33
- (B) 34
- (C) 32
- (D) 30

1.4.15 Growth Rate Analysis

1. A house worth \$350,000 when purchased, was worth \$335,000 after the first year and \$320,000 after the second year. If the economy does not pick up and this trend continues, what will be the value of the house after 6 years.

- (A) \$410,000
- (B) \$275,000
- (C) \$260,000
- (D) \$245,000

2. What can be inferred from the rate of change for data collected over time?

- (A) Projected income growth
- (B) Frequency distribution
- (C) Measures of central tendency
- (D) Data visualisation

3. What is the pattern growing by 30, 40, 50, 60, 70

- (A) +10
- (B) -10
- (C) +2
- (D) -2

4. Which of the following is an example of exponential growth?

- (A) A population increasing by 5% every year
- (B) A car losing \$1,000 in value each year
- (C) A store discounting items by \$10 each month
- (D) A student earning \$50 each week at a job

5. While Company A's profits increased by 10% in 2019, Company B's profits saw a ____ of 5%.

- (A) Rise
 - (B) Drop
 - (C) Peak
 - (D) None of above
6. A population of 2,000 grows at 4% per year for 2 years. What is the population after 2 years?
- (A) 2080
 - (B) 2163
 - (C) 2200
 - (D) 2240
7. Population of a Village depreciates by 15% every year. Find the population of the village after 2 years, if the present population is 24000.
- (A) 16790
 - (B) 17340
 - (C) 18750
 - (D) 19580
8. Which kitten grows fastest? What is its rate of change?
- (A) Kitten A with a rate of change of 3
 - (B) Kitten B with a rate of change of 4
 - (C) Kitten A with a rate of change of 4
 - (D) Kitten B with a rate of change of 3
9. Write an equation that models the following situation: The current student count at John Jay is 6500, it is expected to grow at a rate of 14% next year.
- (A) $Y = 6500(1 + .14)^x$
 - (B) $Y = 6500(1 - .14)^x$
 - (C) $Y = 6500(14)^x$
 - (D) $Y = 14(6500)^x$
10. Which interest model when graphed is an exponential J curve?
- (A) Simple Interest
 - (B) Compound Interest

1.4.16 Trend Analysis

1. Which grade decreased in frequency every year according to the data?
 - (A) Grade A
 - (B) Grade B
 - (C) Grade C
 - (D) Grade D
2. Identify the trend in the following data: 100, 90, 80, 70. What is happening to the values?
 - (A) The values are remaining constant.
 - (B) The values are fluctuating.
 - (C) The values are decreasing.
 - (D) The values are increasing.
3. If a graph shows a steady increase in population over 10 years, what can be predicted for the next year?
 - (A) The population is expected to increase.
 - (B) The population will remain the same.
 - (C) The population will decrease.
 - (D) The population will fluctuate unpredictably.
4. Data-Education spending: 6.6% in 1950 → 6.3% in 2010 Which sentence best describes this trend using the correct structure?
 - (A) Education saw no change, as it was always the same amount.
 - (B) Education remained unchanged at 6.3% in 1950 and 2010.
 - (C) Education decreased sharply to 6.3% in 2010 from 6.6% in 1950.
 - (D) Education remained relatively stable at around 6% during both years.
5. If the hippo population trend continues, what will the population be in 2011?
 - (A) 12
 - (B) 24
 - (C) 42
 - (D) 38
6. What are employment trends?
 - (A) Trends in clothing
 - (B) Trends in job applications

- (C) Trends in the stock market
 - (D) Trends in the job market
7. What was the overall trend on this graph?
- (A) Decreasing
 - (B) Increasing
8. Which overview best summarizes the main trends?
- (A) Overall, car usage increased slightly, while walking remained the same.
 - (B) Overall, there was a shift from active transport modes to car travel, and walking, once dominant, declined significantly.
 - (C) Overall, all transport modes except car declined, and cycling became the most popular method.
 - (D) Overall, most transport modes remained unchanged, except for walking.
9. What is the trend in New York snowfall between January and May?
- (A) It increased
 - (B) It decreased
 - (C) It stayed the same
 - (D) None of above
10. This is a ____ trend.
- (A) Modest increase
 - (B) Downward trend
 - (C) Upward trend
 - (D) None of above
11. How do you know in what direction to draw your trend line?
- (A) From highest point toward lowest point
 - (B) From first point toward last point
 - (C) From middle point toward last point
 - (D) None of above

1.5 Statistics and Public Data

1.5.1 Census Data

1. Which of the following is the most literate State in India?
- (A) Andhra Pradesh
 - (B) Kerala
 - (C) Arunachal Pradesh
 - (D) Madhya Pradesh
2. Statement: As stated in the recent census report the female to male ratio is alarmingly low. Courses of Action: 1) The government should conduct another census to verify the results. 2) The government should immediately issue orders to all the departments to encourage people to improve the ratio.
3. Which of the following is an advantage of using a census?
- (A) Unbiased and accurate results.
 - (B) Cheaper and quicker.
 - (C) Less data to consider.
 - (D) Not completely representative.
- (A) Only 1 follows
- (B) Only 2 follows
- (C) Either 1 or 2 follows
- (D) Neither 1 nor 2 follows
- (E) Both 1 and 2 follow

1.5.2 Population Statistics

1. Countries with high growth rates usually have an age structure that has
- (A) An even distribution over all ages
 - (B) More older people than young people
 - (C) More younger people than older people.
 - (D) More middle-aged people than younger people.
2. The average number of people who live in a measurable area, reached by dividing the

- number of inhabitants in an area by the amount of land they occupy
- (A) Carrying capacity
 - (B) GDP
 - (C) Population density
 - (D) GNP
3. In a town, the population was 8000. In one year, male population increased by 10% and female population increased by 8% but the total population increased by 9%. The number of males in the town was
- (A) 4000
 - (B) 4500
 - (C) 5000
 - (D) 6000
4. Which Indian state has the lowest literacy rate as of 2021?
- (A) Bihar
 - (B) Rajasthan
 - (C) Uttar Pradesh
 - (D) Jharkhand
5. The population of a city is 500,206. In that population, 147,389 are children. How many adults live in the city?
- (A) 352,917 adults live in the city
 - (B) 647,595 adults live in the city.
 - (C) 447,183 adults live in the city.
 - (D) 352,817 adults live in the city.
6. Mrs. Boris is interested in learning about how Williamson County high school students feel about pollution, so one afternoon she surveys the first 200 students to leave one high school's front door when the final bell rings. What is the population?
- (A) The 200 students surveyed
 - (B) The students of this one high school
 - (C) All Williamson County high school students
 - (D) All teenagers in the world
7. Compared to the geometric increase method, the arithmetic increase method generally gives:
- (A) Higher population value
 - (B) Lower population value
 - (C) Equal population value
 - (D) Unpredictable results
8. After World War II, young people were married in record numbers and as a result there was a surge in the birth rate over the next couple of years.
- (A) Baby Boom
 - (B) Foster Care
 - (C) Project Head Start
 - (D) GI Bill
9. Assertion (A): Geometric increase method assumes constant percentage growth. Reason (R): Population increases by a fixed number every decade.
- (A) Both A and R are true and R explains A
 - (B) Both A and R are true but R does not explain A
 - (C) A is true but R is false
 - (D) A is false but R is true
10. In India, which demographic group experiences the highest unemployment rate among all age group?
- (A) Children (0-14 years)
 - (B) Elderly (60+ years)
 - (C) Middle-aged adults (30-59 years)
 - (D) Youth (15-29 years)
11. About how many more people live in India than in the U.S.?
- (A) 250,000,000 people
 - (B) 650,000,000 people
 - (C) 100,000,000 people
 - (D) 80,000,000 people
12. Proportion of literate population in the 7 and above age group is called as-
- (A) Attendance Rate

- (B) Knowledge Rate
(C) Excellence Rate
(D) Literacy Rate
13. What was the female literacy level of India during independence?
(A) 7%
(B) 5%
(C) 16%
(D) 9%
14. Patterns of Population deals primarily with:
(A) Groups of people
(B) Who has the power and how is it being used?
(C) Science and technology
(D) None of these
15. How much was the population growing between 1000 and 1300?
(A) About 10 million each century
(B) About 5 million each decade
(C) About 25 million each event
(D) About 1 million each year
16. What is the US's current population, approximately?
(A) 33 Billion
(B) 330 Billion
(C) 330 Million
(D) 33 Million
17. The variation in population among nations is due to:
(A) Same birth and death rates
(B) Differences in culture, health care, and education
(C) Equal economic development
(D) Uniform literacy rates
18. One of the following was high during British rule over India:
(A) Literacy rate
(B) Female literacy rate
(C) Infant mortality rate
(D) Life expectancy

1.5.3 Government Statistics

1. Which organisation carries out survey for determining the poverty line?
(A) NSSO
(B) CSO
(C) Planning commission
(D) None of the above
2. Your class is discussing "Job Opportunities in the Technical Field." Where is the MOST relevant place to get real data?
(A) Career memes on Facebook
(B) Labour market report from the Department of Statistics Malaysia
(C) Your cousin's opinion
(D) A TV drama about engineers
3. Who is responsible for the administration of adult education in India?
(A) Ministry of Education
(B) National Literacy Mission Authority (NLMA)
(C) University Grants Commission (UGC)
(D) All India Council for Technical Education (AICTE)

1.5.4 Educational Statistics

1. What is the target for universal education (from pre-school to secondary) by NEP 2020?
(A) 2025
(B) 2030
(C) 2040
(D) 2050
2. How many post-secondary institutions are

- there in the United States?
- (A) Approximately 10,000
 - (B) More than 12,200
 - (C) More than 6,700
 - (D) Approximately 5000
3. What does the term 'Retention' in education refer to?
- (A) The process of increasing school enrollment rates
 - (B) The ability of students to complete their course or level of education after being admitted
 - (C) The drop in the number of students enrolled in educational institutions
 - (D) The number of students attending school for the first time
4. According to NEP 2020, the National Assessment Centre, name is ____ to assess student learning.
- (A) CBSE
 - (B) NISC
 - (C) PARAKH
 - (D) NAAC
5. MySchool provides NAPLAN and PISA data to inform parents about school performance.
- (A) True
 - (B) False
6. How does access to educational resources vary between urban and rural areas?
- (A) Urban areas have fewer educational resources than rural areas.
 - (B) Access to educational resources is the same in urban and rural areas.
 - (C) Rural areas have more educational resources than urban areas.
 - (D) Access to educational resources is typically greater in urban areas than in rural areas.
7. There are more degree-granting institutions than there are postsecondary or technical schools in the United States.
- (A) True
 - (B) False
8. Which organization is responsible for conducting research and development in education in India?
- (A) National Council of Educational Research and Training
 - (B) University Grants Commission
 - (C) All India Council for Technical Education
 - (D) Ministry of Education
9. How many out of school children will be brought back into main stream under NEP 2020?
- (A) 10 lakh
 - (B) 10 crore
 - (C) 2 lakh
 - (D) 2 crore
10. Graduates of a specific school or college
- (A) Undergraduate
 - (B) Scholarship
 - (C) Alumni
 - (D) College major
11. How many types of higher education institutions are there in Belarus?
- (A) 6 types
 - (B) 2 types
 - (C) 3 types
 - (D) 4 types
12. The Article which deals with 'Education for All'
- (A) Article 41
 - (B) Article 43
 - (C) Article 45
 - (D) Article 44
13. What impact does investing in education have on Canada's workforce?
- (A) It leads to a decrease in the country's overall productivity.
 - (B) It restricts the types of jobs available to Canadian citizens.

- (C) It enhances the skills and capabilities of the workforce.
- (D) It increases the reliance on imported labor.
14. The right to free and compulsory education for children between age group of 6 to 14 has been inserted in Indian constitution as
- (A) Article 46
- (B) Article 16
- (C) Article 45 A
- (D) Article 21 A
15. Provides resources to states and communities to ensure that all students reach their full potential.
- (A) National Defense Education Act
- (B) Goals 2000
- (C) The Elementary and Secondary Education Act of 1965
- (D) No Child Left Behind Act
16. Areas having large numbers of socio-economically disadvantaged students will aim for a pupil-teacher ratio (PTR) of under-
- (A) 30:1
- (B) 25:1
- (C) 20:1
- (D) 32:1
17. The policy aims at universalisation of education from pre-school to secondary level with 100 percent ____ in school education by 2030.
- (A) Gross Enrolment Ratio
- (B) Training & Recruitment of Teachers
- (C) International Standard Infrastructure
- (D) Child Enrolment Ratio
18. Which one is a characteristic of the key features in the educational system?
- (A) Having a snack in class
- (B) Declining trend in the early school leaving rate
19. What was the focus of the National Defense Education Act passed during Eisenhower's presidency?
- (A) Boosting math and science learning
- (B) Improving physical education
- (C) Enhancing arts and humanities
- (D) Promoting foreign languages
20. What is the role of the Atolls Education Development Project (AEDP) in STEM education for tourism?
- (A) To develop tourism management software
- (B) To establish STEM labs and promote digital literacy in schools related to tourism
- (C) To train students in fishing techniques
- (D) To reduce government involvement in education
21. These are changes to our education system that will impact Secondary School students from 2022 to 2024. Which one takes effect from 2022?
- (A) PFP relaxation of "best two" subjects (from grade '3' to '4')
- (B) Grade mapping table of O/NA/NT (eg NA grade '3' NT grade 'A')
- (C) Removal of bonus points for NA-level passes of Minimum Entry Requirement subjects to ITE courses
- (D) DSA-JC increased intake from 10% to 20%
22. What is the recommended PTR (Pupil Teacher Ratio) at all levels (except SED groups) of school as per NEP?
- (A) 25:1
- (B) 33:1
- (C) 30:1
- (D) 40:1
23. Identify the field of study being describe in the statement: Quantitative research can assess the type of method teachers used in Math.
- (A) Education
- (B) Business

- (C) Science & Terchnology
(D) Medical & Health
24. According to NEP2020 Sarva Shiksha Abhiyan is called as ____
(A) Sarva Shiksha
(B) Sankul Shiksha
(C) Samagra Shikha
(D) None of above
25. The problems faced in Education sector in India are
(A) Gender discrimination
(B) Less infrastructure in Rural government schools
(C) Compulsory and free education
(D) Lack of sanitation facilities in rural schools
26. Which of the following is a fact about the benefits of education?
(A) Education always leads to fame.
(B) Education can increase job opportunities.
(C) Education is only beneficial for young people.
(D) Education is unnecessary in the digital age.
27. What was the main goal of the Education Development Plan & Policy from 2001 to 2010?
(A) To enhance vocational training
(B) To separate educational systems
(C) To improve overall educational standards
(D) To promote religious education
28. Provided the establishment of at least one primary school for boys and girls in each town under the responsibility of the municipal government
(A) Educational Decree of 1863
(B) Educational Decree of 1853
(C) Royal Decree of 1883
(D) None of above
29. Which is an example of aligning questions to various educational concepts within Health Sciences?
(A) Ask only about campus parking.
(B) Include only arithmetic drills.
(C) Focus solely on publisher history.
(D) Include items spanning physiology, pathophysiology, and clinical decision-making.
30. Educational inequality refers to the unequal distribution of academic resources and opportunities among students from different backgrounds. Which of the following best describes this concept?
(A) Equal access to education for all students
(B) Unequal distribution of educational resources
(C) Standardized testing for all students
(D) Uniform curriculum across all schools
31. In Which year National Educational Policy Introduced first?
(A) 1986
(B) 1985
(C) 1867
(D) 1999
32. Educational inequality refers to:
(A) Differences in students' personal interests
(B) Unequal access, resources, and opportunities in education
(C) Different teaching styles used by teachers
(D) Students' academic preferences
33. In which year the New Education Policy was introduced in India?
(A) 1968
(B) 1986
(C) 1976
(D) None of above
34. A number that indicates how well or how high you scored in your courses on average. It's meant to score you during your studies and

shows whether your overall grades have been high or low.

- (A) AP/Pre AP
- (B) Credit Hours
- (C) GPA
- (D) ACT

35. At what age a child will formally start his education as per NEP 2020

- (A) 5 years
- (B) 6 years
- (C) 4 years
- (D) 3 years

1.5.5 Environmental Statistics

1. Hey Aiden, Olivia, and Ethan! Let's play a game! Which activity do you think contributes the MOST to carbon emissions?

- (A) Forestry
- (B) Transport
- (C) Agriculture
- (D) Energy supply

2. Harmful substances mixed with water, air, or soil

- (A) Ecosystem
- (B) Environment
- (C) Pollution
- (D) Population

3. This act was created by the US Environmental Protection Agency to authorize the National Ambient Air Quality Standards (NAAQS) to assist in the creations of law to protect the environment. This act was also established to handle problems such as acid rain, ground-level ozone, and air toxics.

- (A) Clean Air Act
- (B) Clean Water Act
- (C) Energy Policy Act
- (D) Department of Energy

4. What environmental problem is exacerbated by airborne pollution in China?

- (A) Earthquakes
- (B) Acid rain
- (C) Tsunamis
- (D) Sandstorms

5. Ozone depletion would magnify production of

- (A) Vitamin A

- (B) Vitamin B
- (C) Vitamin C
- (D) Vitamin D

6. The narrow zone of the earth where land, water and air interact with each other to support life is called

- (A) Hydrosphere
- (B) Atmosphere
- (C) Lithosphere
- (D) Biosphere

7. Factories, Cars and buses make the air dirty with smoke they sometimes let out. This is called air

- (A) Population
- (B) Pollution

8. What is one environmental impact of mining?

- (A) Renewable energy
- (B) Improved air quality
- (C) Habitat destruction
- (D) Soil conservation

9. Which act was created by the US Environmental Protection Agency to authorize the National Ambient Air Quality Standards (NAAQS) to assist in the creations of law to protect the environment?

- (A) National Environmental Policy Act
- (B) Clean Air Act
- (C) Energy Independence and Security Act
- (D) Energy Policy Act

10. Excessive nutrients in aquatic ecosystems resulting in algal bloom, leads to fish kills, loss of biodiversity, and cause water unfit for drinking and other industrial uses is called

- (A) Water pollution
 - (B) Eutrophication
 - (C) Soil pollution
 - (D) None of above
11. An increased demand for soybeans has led to an increase in converting native forests and grasslands to fields for growing soybeans. One negative consequence of this environmental change has been
- (A) An increase in natural resources for the future
 - (B) An increase in the kinds of foods that can be produced
 - (C) A decrease in suitable habitats for wildlife
 - (D) A decrease in the need to set aside land for conservation
12. The intervention in the climate system of the Earth through strategies such as atmospheric carbon dioxide removal or regulation of solar radiation is otherwise called:
- (A) Mitigation
 - (B) Geo-engineering
 - (C) Adaptation
 - (D) None of above
13. The flow of solid waste that is recycled, incinerated, placed in a solid waste landfill, or disposed of in another way.
- (A) Integrated Waste
 - (B) Bottom Ash
 - (C) Waste Stream
 - (D) Leachate liquids
14. The impact on the environment created by the Industrial Revolution
- (A) Anthropogenic Changes
 - (B) Climate Change
 - (C) Environmental Impact
 - (D) Pollution
15. Which event associated with the World Environment Day is celebrated to inspire people to reduce energy consumption at the workplace?
- (A) Water Day
 - (B) Eco-action day
 - (C) My Earth My Duty day
 - (D) Cycling day
16. What is the average weather for a particular time and region called?
- (A) Drought
 - (B) Weather
 - (C) Emissions
 - (D) Climate
17. Which school of economics views human economic systems as subsystems of the biosphere that depend heavily on the earth's irreplaceable natural resources and ecosystem services?
- (A) Classical
 - (B) Neoclassical
 - (C) Capitalistic
 - (D) Ecological
 - (E) Socialistic
18. What is the role of the United Nations Environment Programme (UNEP)?
- (A) The UNEP coordinates global environmental efforts and promotes sustainable development.
 - (B) The UNEP is responsible for military operations worldwide.
 - (C) The UNEP focuses solely on economic development.
 - (D) The UNEP manages global trade agreements.
19. CERCLA or Superfund ____ provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment.
- (A) Clean Water Act
 - (B) Clean air act
 - (C) Soil composition
 - (D) Comprehensive Environmental Response

20. The Jones family cares about the environment. They run their dishwasher only when it is completely full. Which of the following BEST explains why they do this?
- (A) To save money
 - (B) To recycle dish soap
 - (C) To reduce sewage
 - (D) To conserve water
21. The chemical, biological, and physical status of a body of water.
- (A) Nonpoint-source pollution
 - (B) Point-source pollution
 - (C) Water quality
 - (D) Bioindicators
22. This is the average temperature and amount of rainfall in a particular environment.
- (A) Biomes
 - (B) Climate
 - (C) 32 degrees
 - (D) Community
23. The average temperature of Hanford over 50 years is an example of what?
- (A) Albedo
 - (B) Weather
 - (C) Climate
 - (D) Climate change
24. Which environmental disaster released Methyl Mercury into the water system?
- (A) Bhopal
 - (B) Chernobyl
 - (C) Minimata
 - (D) Fukushima
25. Long term weather patterns
- (A) Frequency
 - (B) Magnitude
 - (C) Climate
 - (D) Weather
26. MoEF stands for
- (A) Ministry of Ecological Fund
 - (B) Ministry of Equal Future
 - (C) Ministry of Environment and Forests
 - (D) Ministry of Elite Fund
27. Flora and fauna in environment, health, diseases are examples of ____
- (A) Physical factors
 - (B) Psychological factors
 - (C) Biological factors
 - (D) Economic factors
28. What is the importance of the National Environment Policy?
- (A) It makes environmental provisions clearer
 - (B) It reduces environmental awareness
 - (C) It promotes pollution
 - (D) It complicates environmental laws
29. Conserve and sustainably use the oceans, seas, and marine resources
- (A) Good Health and Well-being
 - (B) Life Below Water
 - (C) Life on Land
 - (D) Clean Water and Sanitation
30. Where can carbon be stored for millions of years?
- (A) Photosynthesis
 - (B) Formation of fossil fuels
 - (C) Cellular respiration
 - (D) None of above
31. Pollution that builds up on the ground and land of Earth. An example is a county dump or trash thrown on the ground.
- (A) Land pollution
 - (B) Water pollution
 - (C) Air pollution
 - (D) None of above

32. A section of forest was cut down to make space for a new neighborhood. Clearing the forest took away part of the land where the local deer population lives. Which term is used to describe this effect on the deer population?
- (A) Overharvesting
 - (B) Pollution
 - (C) Habitat destruction
 - (D) Resource use
33. What is the purpose of the Canadian Environmental Protection Act?
- (A) To regulate pollutants and protect the environment
 - (B) To promote classical music
 - (C) To fund historical research
 - (D) To manage sports events
34. Chemicals released from an Industrial Plant directly into a river
- (A) Point
 - (B) Non-Point
35. This environmental steward was the first person ever to win a Nobel Peace Prize for environmental work.
- (A) Dr. Wangari Maathai (Kenya)
 - (B) Prime Minister Gro Harlem Brundtland (Norway)
 - (C) Mr. Barry Commoner (USA)
 - (D) Rachel Carson (USA)
36. Pollution that is ___ will break down over time. A good example would be ___
- (A) Biodegradable / A styrofoam box
 - (B) Persistent / An aluminum can
 - (C) Persistent / Lead
 - (D) Biodegradable / Grass clippings
37. A widely used climate classification system is the ___ system.
- (A) Korten
 - (B) Topographic
 - (C) Koppen
 - (D) Maunden
38. Deforestation, over-grazing, over-farming, and drought are all ___, and they most impact the ___ region of Africa.
- (A) Causes of deforestation / tropical rainforest
 - (B) Effects of desertification / savanna
 - (C) Causes of desertification / Sahel
 - (D) Effects of deforestation / Sahara
39. Oil from your car going into the water would be what type of pollution
- (A) Toxic
 - (B) Nutrient
 - (C) Sediment
 - (D) Bacterial
40. Hydroelectric dams can lead to increased evaporation due to a larger surface area of the reservoir. This is an example of a(n) ___ impact.
- (A) Ecological
 - (B) Environmental
 - (C) Economic
 - (D) None of above
41. The UN's first major conference on international environmental issues was
- (A) Kyoto Protocol
 - (B) Intergovernmental conference
 - (C) Stockholm conference
 - (D) Tblisi+ 30
42. How does mining affect the environment?
- (A) Mining has no impact on the environment.
 - (B) Mining can lead to deforestation, habitat destruction, soil erosion, water pollution, air pollution, and climate change.
 - (C) Mining actually improves the environment.
 - (D) Mining only affects the environment in a positive way.

43. The process by which an increase in ocean CO₂ causes more CO₂ to be converted to carbonic acid, which lowers the pH of the water.
- (A) Global Change
 - (B) Anthropogenic changes
 - (C) Ocean Acidification
 - (D) Coral bleaching
44. A flood that covers a meadow and drowns animals and a late frost that kills young plants are examples of how ____ can affect the size of a population.
- (A) Space
 - (B) Food
 - (C) Weather
 - (D) Growth
45. Which act focuses on reducing air pollution and maintaining air quality standards in the United States?
- (A) Clean Water Act
 - (B) Clean Air Act
 - (C) Resource Conservation and Recovery Act
 - (D) National Environmental Policy Act
46. A dead zone refers to not enough ____ being present in the water to sustain life.
- (A) Nitrogen
 - (B) Carbon
 - (C) Oxygen
 - (D) Phosphorus
47. To provide advancement and facilitate research and studies on toxic chemicals.
- (A) Philippine Environmental Impact Statement System of 1978
 - (B) Philippine Toxic Substances, Hazardous, and Nuclear Waste Control Act of 1990
 - (C) National Environmental Awareness and Education Act of 2008
 - (D) Climate Change Act of 2009
48. Less of an immediate environmental impact than fossil fuels-no air pollution-less disturbing to land than fossil fuels-extremely efficient
- (A) Cons of nuclear power
 - (B) Pros of nuclear power
49. All of the following disciplines are major contributors to the field of environmental science except
- (A) Biology and earth science.
 - (B) Chemistry and physics
 - (C) Social sciences.
 - (D) Linguistics
50. Humans can cause different types of environmental pollution. When household cleaners are dumped down the drain and make their way into the water supply, which type of pollution has taken place?
- (A) Air pollution
 - (B) Thermal pollution
 - (C) Chemical pollution
 - (D) Biological pollution
51. What could be the possible effects in the environment if there is an improper disposal of industrial waste?
- (A) Climate Change due to CO₂
 - (B) Mass extinction of animals
 - (C) Noise Pollution
 - (D) Land Pollution
52. Which applies to this environmental problem: Shark fin soup is consumed by millions of people in South East Asia.
- (A) Habitat Loss
 - (B) Invasive Species
 - (C) Pollution
 - (D) Population Growth
 - (E) Overconsumption
53. This is an act that regulates hazardous waste and creates a “cradle to grave” monitoring system. This legislation also regulates and monitors sanitary landfills.
- (A) Clean Air Act
 - (B) Resource Conservation and Recovery Act (RCRA)
 - (C) Delaney Clause

- (D) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
54. What problem do environmental engineers solve?
- (A) Educational content
 - (B) Transport problems
 - (C) Entertainment systems
 - (D) Environmental issues
55. This is responsible for requiring the Environmental Protection Agency to set standards of maximum containment levels for water pollutants that have negative health impacts for humans.
- (A) Federal Wetlands Protection Act 2008
 - (B) Clean Water Act 1972
 - (C) Water Quality Act
 - (D) US Safe Drinking Act 1974
56. What two environmental changes can be found in this image?
- (A) Pollution and climate change
 - (B) Climate change and urbanization
 - (C) Deforestation and pollution
 - (D) Urbanization and deforestation
57. The environmental impact of mining includes erosion, loss of biodiversity, contamination of soil and water.
- (A) Short Term Impact
 - (B) Long Term Impact
58. The combustion of fossil fuels has led to increased CO₂ in the atmosphere. A lot of that excess CO₂ gets absorbed into the ocean. This is one of the causes of coral bleaching.
- (A) Food availability
 - (B) Ocean acidity
 - (C) Shifting habitats
 - (D) . Economic effects
59. The average of all weather conditions through all seasons over a period of time is called ____
- (A) El Nino
 - (B) Micro-climate
 - (C) Climate
 - (D) Greenhouse effect
60. This law sets maximum contaminant levels on pollutants in ground water
- (A) Clean Water Act (CWA)
 - (B) Safe Drinking Water Act (SDWA)
 - (C) National Environmental Policy Act (NEPA)
 - (D) Oil Pollution Act
 - (E) Coastal Zone Management Act
61. What is the role of the Council on Environmental Quality (CEQ)?
- (A) Regulates 253 million acres of public land
 - (B) Manages environmental research and assessment of fish, wildlife, and natural habitat
 - (C) Works with US agencies to develop environmental policies and initiatives
 - (D) Controls US policy with regard to safety and handling of nuclear material
62. The overall weather in an area over a long period of time is known as:
- (A) Weather
 - (B) Climate
 - (C) Change
 - (D) Hurricane
63. Forests are also called ____
- (A) Lungs
 - (B) Ecosystem
 - (C) Green Lungs
 - (D) Oxygenated
64. Which event associated with the World Environment Day is celebrated to inspire people to reduce energy consumption at the workplace?
- (A) Water Day
 - (B) Eco-action day
 - (C) My Earth My Duty day
 - (D) Cycling day

65. Does the following indicator represent social economic political or environmental? air quality
(A) Social
(B) Economic
(C) Political
(D) Environmental
66. CO, SO₂, PM, O₃, NO₂, Pb, these are
(A) Primary pollutant
(B) Secondary pollutant
(C) Criteria pollutant
(D) None
67. Identify the result of human activities in Earth's ecosystem
(A) Water evaporates in the Sun
(B) Everyone watching anime all day
(C) Acid rain kills aquatic animals
(D) An animal living in its habitat
68. Which U.S. agency enforces environmental regulations promoting sustainable development?
(A) Office of Sustainable Environmental Practices
(B) Office of Energy and Environmental Standards
(C) Environmental Security Administration
(D) Environmental Protection Agency
69. The EPA (Environmental Protection Agency) oversees cleanup and redevelopment of contaminated property known as:
(A) Sanitary landfills
(B) Brownfields
(C) Recovery facilities
(D) Impoundments
70. Long-term trends in weather
(A) Hazards
(B) Environment
(C) Culture
(D) Climate
71. What is the responsibility of an environmental chemist?
(A) To collect and analyze data to track chemicals in the environment
(B) To make sure sea creatures are safe
(C) To help collect plants and animals
(D) To search for chemical resources
72. Levying taxes on each unit of pollution discharged into the air or water is an example of —
(A) Tradeable pollution rights
(B) Charging user fees
(C) Regulation
(D) Green taxes
(E) Subsidies for beneficial actions
73. National Environmental Awareness and Education Act of 2009
(A) RA 6969
(B) RA 9512
(C) RA 9275
(D) RA 8749

1.5.6 Economic Data Interpretation

1. Inform people of the current exchange rate of peso.
(A) Government/Governance
(B) Industries
(C) Education
(D) Economy
2. Just after the declaration of the results of the Lok Sabha Elections, 2009, the Bombay Stock Exchange's price index (Sensex) rose by 2100 points in a day. Identify the environmental factor which led to this rise?
(A) Legal Environment
(B) Political environment
(C) Social Environment
(D) Economic Environment

3. Toib sells 50 toys with the price of its toy is Rp 3.000. If after all toys are sold, he gets loss Rp 25.000, so the price of all toys he bought is ____
(A) Rp 175.000
(B) Rp 200.000
(C) Rp 150.000
(D) Rp 125.000
4. When a country has a high standard of living, they usually also have ____
(A) High literacy rate
(B) Low GDP per capita
(C) Low literacy rates
(D) High unemployment rates
5. How much money is granted for education in the budget of 2020?
(A) Rs 99, 311.52crore
(B) Rs 39, 466.52crore
(C) Rs 59, 845crore
(D) Rs 65, 211crore
6. Averages are helpful in formulation of economic policies
(A) True
(B) False
(C) Cannot say
(D) None of above
7. Individuals who are employed at a job that is below their skill level
(A) Unemployed
(B) Underemployed
(C) Discouraged workers
(D) Unskilled labor
8. Which of the following best describes the relationship between education and unemployment rates?
(A) Higher education usually leads to higher unemployment
(B) Higher education usually leads to lower unemployment
(C) Education has no effect on unemployment
(D) Unemployment rates are random
9. What's the correlation between a country's literacy rate and their GDP?
(A) The higher a country's literacy rate, the lower its GDP.
(B) The higher a country's literacy rate, the higher its GDP.
(C) A country's literacy rate and GDP have no effect on one another.
(D) None of above
10. The cost you really pay for college based on your family income
(A) Sticker price
(B) Net price
(C) Gross price
(D) Negotiated price
11. Globally, which of the following economic sectors emits the largest percentage of greenhouse gas emissions?
(A) Transportation
(B) Buildings
(C) Industry
(D) Electricity And Heat Production
12. Explain how the literacy rate ties into a country's standard of living.
(A) Higher literacy helps people qualify for better-paying jobs, which can raise salaries and improve standard of living
(B) Higher literacy causes natural resources to disappear, lowering standard of living
(C) Lower literacy raises salaries, improving standard of living
(D) Literacy has no connection to standard of living
13. Which topic would most directly examine costs like healthcare expenditure, productivity loss, and damage to materials?
(A) Economic Effects of Air Pollution
(B) Composition of Air Pollutants
(C) Classification of Air Pollutants
(D) Ozone Depletion and Its Impacts

14. Country X's literacy rate increases. What did they most likely invest in?
- (A) Human capital
 - (B) Capital goods
 - (C) Quotas
 - (D) Economic sanctions
15. How can math help in long-term saving and investing?
- (A) By understanding compound interest
 - (B) By mastering basic arithmetic
 - (C) By solving quadratic equations
 - (D) By memorizing the multiplication table
16. Financial data refers to
- (A) Inflation
 - (B) Statement of Comprehensive Income
 - (C) CAPEX
 - (D) Capacity
17. How did the MA recommend valuing ecosystems to better integrate them into decision-making?
- (A) By ignoring their economic value
 - (B) Through cultural assessments
 - (C) Through genetic studies
 - (D) By assigning them an economic value
18. Which of the following is NOT an example of change over time in economic geography?
- (A) Industrial labor systems (e.g., cottage industry, factory, office, telecommunications)
 - (B) Migration from urban to rural areas
 - (C) Industrialized countries export labor-intensive work to developing nations
 - (D) Growth of trade alliances
19. Which performance indicator measures the amount gained from an investment relative to the investment's cost?
- (A) Search Engine Optimization
 - (B) ROI
 - (C) KPI
 - (D) Margin of Error

1.6 Data and Governance

1.6.1 Data Mapping

1. Choropleth maps encode data using:
- (A) Shapes
 - (B) Sizes
 - (C) Color intensity
 - (D) Transparency
2. If one ice cream cone symbol means one vote, how many cones should you draw for 4 chocolate votes?
- (A) Two cones total
 - (B) Four cones total
 - (C) Five cones total
 - (D) Seven cones total
3. Which is used to show population density on a map?
- (A) Heatmap
 - (B) Histogram
 - (C) Bar chart
 - (D) Pie chart
4. A map that has only lakes, rivers, hills is a
- (A) Political map
 - (B) Physical map
 - (C) Thematic map
 - (D) Locator map
5. What does a dot density map represent?
- (A) Key feature or attribute
 - (B) Political borders
 - (C) Population density
 - (D) Elevation
6. Which one of the following processes is the main task for the computer in mapping the geographical data?

- (A) Data Storage
 - (B) Data Visualization
 - (C) Data Retrieving and Drawing
 - (D) Data Collection
7. The relation between the actual size of something and its size on a map, diagram or model that represents it.
- (A) Key
 - (B) Scale
 - (C) Cartogram
 - (D) Elevation
8. This map focuses on a particular theme or specific topic.
- (A) Road map
 - (B) Physical map
 - (C) Political map
 - (D) Thematic map
9. What type of data does GIS typically represent?
- (A) Only numerical data
 - (B) Audio data
 - (C) Geographic data in the form of maps
 - (D) Textual data only
10. The left grouping in a mapping is the ____
- (A) Domain.
 - (B) Range.
 - (C) Y-axis.
 - (D) Relation.
11. Map making with a computer program that allows you to view many layers of geographic information on the same map
- (A) Geographic Information Systems (GIS)
 - (B) Computer Assisted Mapping (CAM)
 - (C) Aerial Photograph
 - (D) None of above
12. Mapping "height of bar" to "sales value" is an example of mapping data to which aesthetic?
- (A) Shape
 - (B) Position
 - (C) Size
 - (D) Transparency
13. What can be displayed on a map chart in Excel?
- (A) Relative importance of data
 - (B) Hierarchical values of data
 - (C) Geographical or population data
 - (D) Proportional sizes of segments within a circle
14. A city map shows a restaurant at (6, 1) and a movie theater at (6, 5). How many units apart are these two locations vertically?
- (A) 4 units
 - (B) 3 units
 - (C) 5 units
 - (D) 2 units
15. If you were looking to find out how much rainfall different areas receive, what type of map would be best?
- (A) Climate map
 - (B) Political map
 - (C) Physical map
 - (D) Population map
16. A scale that maps low to high values continuously is called:
- (A) Sequential
 - (B) Diverging
 - (C) Qualitative
 - (D) Nominal
17. Can we create map chart in Analytics
- (A) True
 - (B) False
18. Geographic information systems for capturing, storing, checking and displaying data related to the surface of the Earth as a map.
- (A) GIS.
 - (B) Cookie.
 - (C) ANPR.
 - (D) ATM.

19. Spatial data is organised in 3 types
(A) Points, arrows and polygons
(B) Points, lines and polygons
(C) Points, levels and shapes
(D) Positions, ranks and shapes
20. What type of map is a choropleth map?
(A) A cartogram map
(B) A dot density map
(C) A thematic map
(D) A reference map
21. The scale of a map says that 6 cm represents 15 km. What distance on the map represents an actual distance of 6 kilometers?
(A) 3.6
(B) 2.5
(C) 2.4
(D) .42
22. A map feature that explains the meaning of colors and symbols used on a map
(A) Map contents
(B) Map glossary
(C) Map key
(D) Map index
23. The data stored by a GIS is made up of different ____
(A) Layers
(B) Zones
(C) Sectors
(D) Precincts
24. On a certain map, 1 cm = 20 km actual distance. If two places are 140 km apart. what is their distance on the map?
(A) 10 cm
(B) 7 cm
(C) 2 cm
(D) 15 cm
25. Mapping temperature to red-blue gradient uses:
(A) Qualitative scale
(B) Sequential scale
(C) Diverging scale
(D) Ordinal scale
26. Cartograms distort the real size of an area.
(A) True
(B) False
27. Maps are visualisation tools for ____ data.
(A) Precision
(B) Accuracy
(C) Spatial
(D) Elevation
28. Scientists can predict when a ____ will happen by mapping out the data of when an ocean earthquake has occurred.
(A) Tsunami
(B) Hurricane
(C) Earthquake
(D) Wildfire
29. Which mapping option shows differences in elevation of the land?
(A) Political map
(B) Road map
(C) Topographic map
(D) Climate map
30. The relationship between distance in real life and distance on a map is indicated by a ____
(A) Scale
(B) Compass Rose
(C) Legend
(D) Key
31. It provides an explanation of a map symbol-ogy.
(A) A legend
(B) A choropleth map
(C) A scale bar
(D) A tax map

32. This map focuses on the boundaries of a country and its cities.
(A) Road map
(B) Physical map
(C) Political map
(D) Thematic map
33. Which type of map would be best suited for trying to identify the shortest route between New York and London?
(A) Conic projection
(B) Gnomonic projection
(C) Mercator projection
(D) Topographic map
34. What type of map reveals specific information such as life expectancy, literacy rate, and major religions?
(A) Political map
(B) Physical map
(C) Thematic map
(D) Compass
35. Which relation does the mapping show?
(A) $\{(0, 1), (1, 2), (3, 4)\}$
(B) $\{(1, 0), (2, 1), (2, 2), (4, 3)\}$
(C) $\{(0, 1), (1, 2), (2, 2), (3, 4)\}$
(D) $\{(1, 0), (2, 1), (4, 3)\}$
36. If you are gathering data at the community level and want to accurately identify household locations on a local map, what type of vector data would you need?
(A) Polygon
(B) Line
(C) Point
(D) Pin
37. GIS is helpful for logistics planners because it:
(A) Increases package sizes
(B) Maps delivery routes and identifies traffic issues
(C) Orders supplies
(D) Sorts files
38. Which map would have the smallest scale?
(A) City
(B) State
(C) Continent
(D) World
39. An object that explains the symbols, colors, or patterns used to differentiate the data.
(A) Legend
(B) Data Label
(C) Chart Title
(D) X-Axis
40. What is the purpose of a map chart in Excel?
(A) To combine two different chart types
(B) To show the relative importance of data
(C) To visualize data with multiple levels of categorization
(D) To display geographic information
41. A newly-drawn map of a barangay with a scale of 1:40 (unit to m). Jom's home distance from the school is 5.25 units according to the map. How far is Jom from the school?
(A) 190m
(B) 200m
(C) 210m
(D) 220m
42. A visual representation of an area
(A) Globe
(B) Map
(C) Aerial photograph
(D) GPS
43. All the symbols used on a map make up the ____
(A) Map legend
(B) Map scale
(C) Map grid
(D) Map compass
44. Google Earth shows layers of data of the earth's surface. It is an example of ____
(A) GPS
(B) GIS

45. In the twentieth century, people learned how to make maps using photographs from
(A) Ships
(B) Airplanes
(C) Satellites
(D) None of above
46. The comparison of distance on a map to the actual distance across the Earth is called ____
(A) Prime Meridian
(B) Equator
(C) Scale
(D) Title
47. In systematic community action, which method provides a visual representation of the locations of resources and challenges within a community?
(A) Geographic Information Systems (GIS) Mapping
(B) Focus Group Discussions
(C) Random Sampling
(D) Case Studies
48. A map view distorts the size of areas near the
(A) Equator
(B) Tropics
(C) Deserts
(D) Poles
49. What is the purpose of using different colors on a map?
(A) To visually distinguish between different geographical features, boundaries, or data points on the map.
(B) To match the colors of the rainbow
(C) To confuse the map readers
(D) To make the map look more artistic
50. A system for transferring location from a global to a flat map is:
(A) Interruption.
(B) Rendition.
(C) Projection.
(D) Scale.
51. A cartographer makes what?
(A) Fields
(B) Buildings
(C) Maps
(D) Landscapes

1.6.2 Data and Governance

1. Govt = government
(A) True
(B) False
2. Effectiveness and Efficiency Good governance requires that the institutions, processes, and actors deliver and meet the needs of society in a way that available resources are used well. Service delivery in public sector, especially of front-line agencies, must promptly and adequately serve the needs of the citizens instituting simplified government procedures and inexpensive transaction costs.
(A) True
(B) False
3. The Department of Education (DepEd) continues with its aim of improving governance by providing tools that promote a culture of collaboration and communication, and improve performance of tasks.
(A) True
(B) False
4. How can companies ensure transparency in their operations?
(A) Restrict access to company information
(B) Implement clear communication, publish regular reports, engage stakeholders, adopt open data practices, and adhere to ethical standards.
(C) Limit communication to internal teams
(D) Avoid sharing financial data

5. Which of the following is a best practice for data governance?
 - (A) Assigning roles and responsibilities for data management
 - (B) Allowing unrestricted access to all data
 - (C) Storing all data in a single location
 - (D) Avoiding audits to reduce costs
6. Which of the following best illustrates a people failure in data governance?
 - (A) A server crash leads to data loss
 - (B) Cloud storage service becomes unavailable
 - (C) Employees input incorrect data due to lack of training
 - (D) None of above
7. Which of the following is a step in the data governance process?
 - (A) Data discovery.
 - (B) Data visualization.
 - (C) Data storytelling.
 - (D) Data analysis.
8. In decision-making, high-quality data governance leads to:
 - (A) Faster, more reliable, and more informed decisions
 - (B) Increased marketing spending
 - (C) Reduced need for audits
 - (D) None of above
9. What role does data governance play in ensuring the success of business analytics projects?
 - (A) Data governance is only relevant for small businesses
 - (B) Data governance has no impact on business analytics projects
 - (C) Data governance only focuses on data storage
 - (D) Data governance ensures data quality, accuracy, security, and compliance, which are crucial for reliable analytics outcomes.
10. One of the key areas of policy focus in classroom assessment is confidentiality. What does this pertain to?
 - (A) Protecting children's and families' data.
 - (B) Encouraging multiple assessment methods.
 - (C) Defining goals for assessment.
 - (D) Ensuring inclusivity in assessment.
11. Good Governance means that the information relative to their decision and risk management are transparent.
 - (A) True
 - (B) False
12. Reports, censuses, policies, data and statistics issued and published by the government and its attached agencies.
 - (A) Books
 - (B) Reference materials
 - (C) Scholarly articles
 - (D) News/magazines
 - (E) Government documents
13. The goal of data governance is to control various elements that influence trust and confidence in data, such as data lineage, stewardship, and data ____
 - (A) Analytics
 - (B) Quality
 - (C) Scrambling
 - (D) Leading
 - (E) Access
14. Which one of these is NOT the objective of Data Governance?
 - (A) Establish internal rules
 - (B) Implement ComplianceRequirements
 - (C) Increase the value of data
 - (D) Help to maximize risk
15. Data Governance 3.0 Critical Requirements are categorized intoa. Line of Business, b. Data Governance, c. Data Management Which is NOT a Data Management requirement of Data Governance 3.0?

- (A) A comprehensive data management platform that support all use cases
(B) Scale across systems and business units to ensure efficient operations and accurate analytics
(C) Define Policy for quality access, protection, retention and deletion
(D) None of above
16. What is a Data Governance Framework?
(A) A software tool for managing data storage
(B) A set of guidelines and practices for managing data assets
(C) A database schema design template
(D) A legal document for data sharing
17. According to the article, what is the first step to ensure success with data governance? [Ref: Designing Data Governance That Delivers Value]
(A) Forming a data-governance council
(B) Defining a set of data domains
(C) Securing top management's attention
(D) Establishing quality standards
18. What does the term "data governance" refer to?
(A) The process of data encryption
(B) The management of data availability, usability, and security
(C) The creation of data visualizations
(D) The analysis of large datasets
(E) The physical destruction of data
19. ASEAN Member States have jointly developed ASEAN Framework on Digital Data Governance to promote harmonization of data regulations and intra-ASEAN flows of data
(A) TRUE
(B) FALSE
20. How does data governance impact data quality?
(A) Data governance is only relevant for data storage, not quality.
(B) Data governance has no effect on data quality.
(C) Data governance enhances data quality by enforcing standards and accountability.
(D) Data governance decreases data quality by introducing complexity.
21. Data governance enables shared responsibility for data-related decisions. True or False?
(A) True
(B) False
22. DAMA is a framework used primarily for:
(A) Data management and governance best practices
(B) Network Security
(C) Financial auditing
(D) None of above
23. What is the role of a Chief Data Officer (CDO) in a typical data governance structure? [Ref: Designing Data Governance That Delivers Value]
(A) To execute the day-to-day work
(B) To set the overall direction and standards
(C) To act as a data-domain owner
(D) To approve funding
24. Which of the constitutional provisions deal with environment conservation
(A) Art 14
(B) Art 15
(C) Art 21A
(D) Art 48A
25. What is the opportunity cost of not getting data governance right? [Ref: Designing Data Governance That Delivers Value]
(A) Missed upside, extensive time lost in manually cleaning data, incorrect and sub-optimal business decisions
(B) Increased cost of data storage
(C) Increased cost of data acquisition
(D) Increased cost of data analysis

26. What is the recommended approach to data governance for data used only in an exploration setting? [Ref: Designing Data Governance That Delivers Value]
- (A) Apply light governance
 - (B) Apply strict governance
 - (C) Do not apply any governance
 - (D) Apply the same level of governance as for other data
27. The set of data policies that apply to how data is gathered, stored, processed, and disposed of in a company
- (A) Data integrity
 - (B) Data governance
 - (C) Data archiving
 - (D) Data management
28. James found a small data issue in one of AIDE's tables. James should ____
- (A) Log a Data Governance Suggestion.
 - (B) Solve it on its own.
 - (C) Keep it to himself
 - (D) Not mind it all.
29. How does data governance contribute to data quality in business analytics?
- (A) By preventing data from being used for analytics
 - (B) By ensuring that data is cleaned and transformed regularly
 - (C) By implementing rules and processes to ensure data accuracy, consistency, and compliance
 - (D) By visualizing data to detect patterns and trends
30. In order to have good governance in an organization, this major characteristic must be present
- (A) Connections
 - (B) Wealth
 - (C) Accountability
 - (D) Good Looks
31. How should data assets be prioritized for effective data governance? [Ref: Designing Data Governance That Delivers Value]
- (A) By domains and by data within each domain
 - (B) By the size of the data
 - (C) By the age of the data
 - (D) By the source of the data
32. What is essential for ensuring data quality in a BI system?
- (A) Data governance strategy
 - (B) Real-time data processing
 - (C) User-friendly interface
 - (D) Data visualization tools
33. Part of the federal government responsible for conducting and evaluating research, monitoring environmental quality and setting and enforcing standards for pollution levels.
- (A) National Environmental Policy Act (NEPA)
 - (B) Environmental Protection Agency (EPA)
 - (C) Environmental Impact Statement (EIS)
 - (D) General Mining Law
34. What is the key benefit of data governance for an organization?
- (A) Faster access to all data regardless of type
 - (B) Better decision-making through high-quality data
 - (C) Reduced IT staff workload
 - (D) Increased data redundancy
35. A key objective of data governance is to ensure
- (A) Maximum revenue from data sales
 - (B) Data quality, compliance, and accountability
 - (C) Unlimited access to all employees
 - (D) None of above
36. What is the significance of data governance in business data management?
- (A) Data governance focuses solely on data storage solutions.
 - (B) Data governance is only necessary for large corporations.

- (C) Data governance is crucial for ensuring data quality, compliance, and effective decision-making in business data management.
- (D) Data governance is irrelevant to data security measures.
37. What is the primary purpose of health data governance?
- (A) To increase the number of digital health applications
- (B) To ensure data quality, security, privacy, and ethical use
- (C) To replace manual health reporting
- (D) To collect as much data as possible
38. What effect does a rising literacy rate have on South Asia?
- (A) A more complex system of governments and economies with higher quality of life
- (B) A less complex economy and a stable quality of life
- (C) A more complex government with falling quality of life
- (D) No impact on South Asia
39. Acts as a forum for monitoring global environmental trends, convening international meetings and conferences, and negotiating international agreements
- (A) Global Environment Facility (GEF)
- (B) United Nations Environment Programme (UNEP)
- (C) Greenpeace
- (D) International Union for Conservation of Nature (IUCN)
- (E) World Wildlife Fund (WWF)
40. Which factor is essential for ensuring the success of the BI system?
- (A) Data quality and governance strategies
- (B) High costs associated with software licenses
- (C) Limiting access to only top management
- (D) Using outdated technology platforms
41. Who is typically responsible for overseeing data governance within an organization?
- (A) Data Engineer
- (B) Data Governance Committee
- (C) IT Support Team
- (D) Marketing Manager
42. What is the primary reason for the ineffectiveness of most data governance programs today? [Ref: Designing Data Governance That Delivers Value]
- (A) Lack of technology
- (B) Lack of data
- (C) Lack of recognition of the value-creation potential in data governance at the C-suite level
- (D) Lack of guidelines
43. Does this assignment meet the competency? Competency Domain: Domain I: Data Structure, Content, and Information Governance Competency: I.1. Describe the concepts of data governance. Assignment: Create a presentation on what data governance means in the context of HIM.
- (A) Yes
- (B) No
44. Which one of the below is NOT in the list of activities for Data Governance?
- (A) Perform Discovery and Business Alignment
- (B) Underwrite Data Management Projects
- (C) Perform market analysis of data impact on customers
- (D) Define the DG Operating Framework
45. A government publishes all its budget data publicly, but corruption remains high. What does this reveal about governance quality?
- (A) Transparency alone cannot ensure accountability.
- (B) Citizens no longer need to vote.
- (C) Transparency automatically eliminates corruption.
- (D) Publishing data reduces public rights.

46. Which law allows people to find out information about public organisations?
(A) Data Protection Act.
(B) Freedom of Information Act.
(C) Copyright, Designs and Patents Act.
(D) Computer Misuse Act.
47. Data Governance is described as being structured along the lines of three separate dimensions. Which item identifies these three dimensions?
(A) Access, Integration, and Distribution
(B) People, Processes, and Goals
(C) Metadata, Quality, and Security
(D) Owners, Stewards, and Custodians
48. What is the role of technology solutions such as data lakes and data-governance platforms in data governance? [Ref: Designing Data Governance That Delivers Value]
(A) They are a panacea for all data governance issues
(B) They are irrelevant to data governance
(C) They can help but are not a panacea
(D) They are the only solution to data governance issues
49. What is the function of the governance layer?
(A) Managing data security, quality, and compliance
(B) Storing and analyzing data
(C) Processing real-time data streams
(D) Automating machine learning models
50. He maintains and updates the land records of the village, he measures and maintains the agriculture land and he is responsible for collection of land revenue from the farmers
(A) District Collector
(B) Tehsildar / revenue officer
(C) Patwari / village officer
(D) None of the above
51. Which of the following statements is/are true?
a. Historically, the top management is mainly composed of women.
b. Good governance these days gives emphasis on the importance of combined men and women perspectives in decision-making.
(A) Only statement a is true.
(B) Only statement b is true.
(C) Both a and b are true.
(D) Neither statement a, nor statement b is true.
52. An effective information governance plan can generate —
(A) A single source of truth (SSOT)
(B) Redundant, outdated and trivial data (ROT)
(C) Omnichannel support
(D) Both B and C
53. The term data governance refers to the policies and processes for managing the integrity and security of data in a firm.
(A) TRUE
(B) FALSE
54. What is the overarching framework that ensures high data quality, availability, usability, and security in an organization?
(A) Data Profiling
(B) Data Stewardship
(C) Data Governance
(D) Data Encryption
55. Which of the following is NOT a core principle of data governance?
(A) Accountability
(B) Transparency
(C) Ambiguity
(D) Data Quality
56. Who is responsible for a dataset(s) and is considered a senior stakeholder in data governance?
(A) Data processor
(B) Data controller
(C) Data custodian/steward
(D) Data owner

1.6.3 Digital Governance

1. Which ISO standard is related to digital governance?
(A) ISO 20000
(B) ISO 37500
(C) ISO 38500
(D) ISO 8000
2. During a digital health nursing seminar, Priya asked about effective governance. Which of the following is involved?
(A) Integrated Approach
(B) Alignment with Standards
(C) Authorising Environment
(D) All of the above

1.6.4 E-Governance and Data

1. What is the term used to describe the government's communication with citizens, companies, and other organizations using ICT?
(A) E-Commerce
(B) E-Government
(C) E-Learning
(D) E-Health
2. What does the eGov QR feature facilitate?
(A) Tracking application status
(B) Accessing healthcare information
(C) Video consultations
(D) Online signing of documents
3. Which UAE government initiative uses telecommunication to provide all services online through one platform?
(A) UAE Vision 2071
(B) UAE Digital Government (Smart Government)
(C) Sheikh Zayed Housing Programme
(D) Expo Volunteer Program