Package Title: Clicker Questions

Course Title: Black, Chakrapani, Castillo, Business Statistics, Third Canadian Edition

Chapter Number: 02

Shuffle: No

Question type: True/False

1) Frequency distribution is a summary of data presented in the form of class intervals and frequencies.

Answer: True

2) The sum of the relative frequencies of a grouped data set is always equal to one.

Answer: True

3) A histogram is a unit of weight in the metric system.

Answer: False

4) A cumulative frequency distribution is also called an ogive.

Answer: True

5) A graphical mechanism for examining the relationship between two numerical variables is called a cause-and-effect diagram.

Answer: False

6) Time-series data is data gathered on a particular characteristic over a period of time at sporadic intervals.

Answer: False

Question type: Multiple Choice

7) The difference between the largest and the smallest numbers in a data set containing raw data is called \_\_\_.

a) spread

b) deviation

c) error

d) range

Answer: d

8) A useful tool for grouping data is \_\_\_.

a) a frequency distribution

b) group dynamics

c) segmentation

d) constructive statistics

Answer: a

9) In the distribution of a set of grouped data, a running total of the frequencies through the classes is given by the \_\_\_.

a) relative frequency

b) cumulative frequency

c) class midpoint

d) median class frequency

e) modal class frequency

Answer: b

10) In a frequency distribution, which of the following is sometimes referred to as the class mark?

a) relative frequency

b) cumulative frequency

c) class midpoint

d) median class frequency

e) modal class frequency

Answer: c

11) For the following frequency distribution, what is the class midpoint for the class “30-under 40”?  
  
 Class interval Frequency  
 10-under 20 15  
 20-under 30 22  
 30-under 40 46  
 40-under 50 17

a) 15

b) 26

c) 35

d) 46

e) 45

Answer: c

12) For the following frequency distribution, what is the frequency for the class “30-under 40”?  
  
 Class interval Frequency  
 10-under 20 15  
 20-under 30 22  
 30-under 40 46  
 40-under 50 17

a) 15

b) 26

c) 35

d) 46

e) 45

Answer: d

13) The first step in constructing a frequency distribution is to determine the \_\_\_.

a) range of the data

b) number of classes

c) width of the class interval

d) frequency of each class

Answer: a

14) The number of classes in a frequency distribution is \_\_\_.

a) always fixed

b) less than 6

c) is more than 15

d) is subject to the user’s discretion

Answer: d

15) A histogram is a \_\_\_.

a) unit of weight like kilogram

b) historical event

c) type of bar chart

d) type of telegram

Answer: c

16) In a stem and leaf plot of numbers with five digits, the stem has two digits. For the number 48209 the leaf is \_\_\_.

a) 420

b) 209

c) 096

d) 426

e) 482

Answer: b

17) Relative frequencies for a set of data must add up to \_\_\_.

a) the total frequency

b) the cumulative frequency

c) one

d) one hundred

Answer: c

18) A type of vertical bar chart that is used to depict a frequency distribution is called a \_\_\_.

a) frequency polygon

b) histogram

c) dot plot

d) ogive

Answer: b

19) One of ways by which graphical displays such as a histogram are used to “lie with statistics” is by \_\_\_.

a) using multiple colors

b) using 8 classes instead of 10

c) using grouped data instead of raw data

d) changing the scales of the axes

Answer: d

20) Consider the stem-and-leaf display shown here.  
  
 Stem Leaf  
 5 1  
 4 457  
 3 00036  
 2 1134599  
 1 2248  
 0 012  
  
In the second row of the stem-and-leaf display, identify the stem, and the numbers in the original data set represented by this stem and its leaves.

a) stem: 4; original numbers: 44, 45, 47

b) stem: 4; original numbers: 44, 54, 74

c) stem: 4, 5, 7; original numbers: 44, 45, 47

d) stem: 4, 5, 7; original numbers: 44, 54, 74

Answer: a

21) Consider the stem-and-leaf display shown here.  
  
 Stem Leaf  
 5 1  
 4 457  
 3 00036  
 2 1134599  
 1 2248  
 0 012  
  
The most frequently occurring raw data value is

a) 30.

b) 12.

c) 0.

d) 20.

Answer: a

22) A chart commonly used to separate the most common types of defects in order of occurrence is called a \_\_\_.

a) Deming Chart

b) Juran Chart

c) Taguchi Chart

d) Pareto Chart

Answer: d

23) Which of the following graphs is **not** appropriate for qualitative data?

a) pie chart

b) pareto chart

c) bar chart

d) scatter plot

Answer: d

24) A graphical mechanism useful for examining the relationship between two numerical variables is a \_\_\_.

a) pair of pie charts

b) pair of histograms

c) scatter plot

d) Pareto chart

Answer: c

25) A cross tabulation is a process whereby

a) numerical values are separated into two parts.

b) the frequency counts for two variables are displayed simultaneously.

c) a two-dimensional graph is produced by plotting pairs of points.

d) a bar chart is produced using two or more categories along one axis.

Answer: b

26) Time-series data can be measured in all of the following except:

a) hours

b) months

c) semi-annually

d) sporadically

Answer: d

27) Arranging time-series data in regular time intervals and according to time of occurrence is known as:

a) data preparation

b) data cleaning

c) data analysis

d) data arrangement

Answer: b

28) Data gathered for a particular characteristic over a period of time at regular intervals is known as:

a) time-series data

b) measurement data

c) interval data

d) characteristic data

Answer: a

29) An analyst has daily milk consumption for a two-year period for a child. Which time-series data chart should be used to present the data?

a) line chart

b) pie chart

c) scatter plot

d) stem and leaf plot

Answer: a