Chapter 3

Multiple Choice Questions

3.1 Which of the following is NOT a scale of measurement?
a. Nominal
b. Ordinal
c. Contemporary
d. Interval
e. Ratio

3.2 _____ data is categorical data.
a. Nominal
b. Ordinal
c. Interval
d. Ratio

3.3 Numbers on a football jersey are examples of _____ data.
a. Nominal
b. Ordinal
c. Interval
d. Ratio

3.4 _____ scales involve the rank order system.
a. Nominal
b Ordinal
c. Interval
d. Ratio

3.5 First place, second place and third place finishes are examples of _____ data
a. Nominal
b. Ordinal
c. Interval
d. Ratio

3.6 A _____ scale is one in which equal differences in scores represent equal differences in amount of the property measured but with an arbitrary zero point.
a. Nominal

b. Ordinal
c. Interval
d. Ratio

3.7 Distance, weight and duration are all examples of _____ data
a. Nominal
b. Ordinal
c. Interval
d. Ratio

3.8 Which of the following is NOT a measure of central tendency:
a. Mean
b. Median
c. Mode
d. Range

3.9 The _____ is the mathematical average of the distribution of numbers.
a. Mean
b. Median
c. Mode
d. Range

3.10 The mean of the distribution 10, 5, 7, 3, and 5 is:
a. 4
b. 5
c. 6
d. 30

3.11 The _____ is greatly affected by extreme scores.
a. Mean
b. Median
c. Mode
d. All of the above are greatly affected by extreme scores

3.12 The _____ is the middle score in a distribution.
a. Mean
b. Median
c. Mode
d. Range

3.13 In the distribution 9,11,9,15 and 18, what is the median?
a. 15
b. 11
c. 10.5
d. 9

3.14 In the distribution 6, 8, 8, 10,11, 14, 17, the median is:
a. 11
b. 10
c. 10.5
d. 12

3.15 The _____ is less affected by extreme scores than the _____.
a. Mean/median
b. Median/mean
c. Mean/mode
d. Median/mode

3.16 The _____ is the number in the distribution that occurs most frequently.
a. Mean
b. Median
c. Mode
d. Range

3.17 In the distribution 9,11,9,15, and 20, what is the mode?
a. 9
b. 11
c. 15
d. 20

3.18 What is(are) the mode(s) in the following distribution? 9,12,9,12,13, and 20?
a. 9
b. 12
c. 9 and 12
d. 10.5

3.19 If in your distribution you have three or more modes, it is referred to as a
a. Bimodal distribution
b. Multimodal distribution
c. Non-discriminatory distribution

d. Truncated distribution

3.20 A _____ expresses how often a score occurs in a set of data.
a. Frequency distribution
b. Multimodal distribution
c. Non-discriminatory distribution
d. Truncated distribution

3.21 Which of the following is not normally a column when setting up a frequency distribution?
a. Test Score
b. Tally
c. Frequency
d. All of the above are normally columns used when setting up a frequency distribution

3.22 When setting up a frequency distribution it is very easy to calculate the _____ simply by inspection.
a. Mean
b. Standard deviation
c. Mode(s)
d. Variance

3.23 The _____ of a distribution is the difference between the high score and the low score in the distribution.
a. Mean
b. Median
c. Mode
d. Range
3.24 If we had a distribution of 9,11,13,18, and 50, what is the range?
a. 41
b. 51
c. 59
d. 20

3.25 For the following distribution, 30, 50, 45, 50, 25, 40, 10, 55, 65, 20, 60, 33, 45, 33, 20, the range is:
a. 50
b. 61
c. 55
d. 75

3.26 Which of the following is/are greatly affected by an extreme score?
a. Mean

b. Range
c. Mean and Range
d. Neither the mean nor the range

3.27 The _____ the spread, the _____ the variance.
a. Greater/greater
b. Greater/smaller
c. Smaller/greater

3.28 In a distribution with a variance of 25, the standard deviation would be
a. 25
b. 12.5
c. 5
d. Cannot be determined

3.29 In a distribution with a variance of 49, the standard deviation would be
a. 49
b. 24.5
c. 7
d. Cannot be determined

3.30 In a distribution with a variance of 64, the standard deviation would be
a. 64
b. 32
c. 8
d. Cannot be determined

3.31 If the standard deviation of a distribution is 9, then the variance is
a. 3
b. 49
c. 81
d. 100

3.32 If the standard deviation of a distribution is 6, then the variance is
a. 2.31
b. 30
c. 36
d. 66

3.33 If the standard deviation of a distribution is 4, then the variance is
a. 2
b. 16
c. 25
d. 40

3.34 In a normal distribution with a mean of 90 and a standard deviation of 10, approximately what percentage of scores fall between 80 and 100?
a. 13.5
b. 34
c. 68
d. 95

3.35 In a normal distribution with a mean of 90 and a standard deviation of 10, approximately what percentage of scores fall between 80 and 90?
a. 13.5
b. 34
c. 68
d. 95

3.36 In a normal distribution with a mean of 90 and a standard deviation of 10, what percentage of scores fall between 80 and 110?
a. 13.5
b. 34
c. 68
d. 81.5

3.37 In a normal distribution with a mean of 90 and a standard deviation of 10, what percentage of scores fall between 100 and 110?
a. 13.5
b. 34
c. 68
d. 95

3.38 In a normal distribution with a mean of 50 and a standard deviation of 5, what percentage of scores fall between 45 and 55?
a. 13.5
b. 34

c. 68
d. 95

3.39 In a normal distribution with a mean of 50 and a standard deviation of 5, what percentage of scores fall between 55 and 60?
a. 13.5
b. 34
c. 68
d. 95

3.40 In a normal distribution with a mean of 50 and a standard deviation of 5, what percentage of scores fall between 55 and 65?
a. 13.5
b. 16
c. 68
d. 95

3.41 In a _____ skewed distribution the majority of scores fall below the mean.
a. Positively
b. Negatively
c. Both positively and negatively
d. Neither positively nor negatively

3.42 In a _____ skewed distribution the majority of scores fall above the mean.
a. Positively
b. Negatively
c. Both positively and negatively
d. Neither positively nor negatively

3.43 Correlations tell us the _____ between two variables.
a. Range
b. Standard deviation
c. Variance
d. Relationship

3.44 A _____ correlation has a direct relationship between the variables:
a. Positive
b. Negative
c. Zero

3.45 A _____ correlation has an indirect relationship between the variables:
a. Positive
b. Negative
c. Zero

3.46 A _____ correlation has no relationship between the variables:
a. Positive
b. Negative
c. Zero

3.47 As X increases, Y increases is an example of a _____ correlation.
a. Positive
b. Negative
c. Zero

3.48 As X increases, Y decreases is an example of a _____ correlation.
a. Positive
b. Negative
c. Zero

3.49 Correlations range from _____:
a. +1.00 to -1.00
b. -2.00 to +2.00
c. -3.00 to +3.00
d. 0.00 to +1.00

3.50 Which of the following is the strongest correlation?
a. +.50
b. -.85
c. +.71
d. -.34

3.51 Which of the following is the weakest correlation?
a. +.50
b. -.85
c. +.71
d. -.34

3.52 Correlations _____ indicate a cause and effect.

a. Always
b. Sometimes
c. Almost never
d. Never