***Statistics, Data Analysis, and Decision Modeling, 5e* (Evans)**

**Chapter 1 Data and Business Decisions**

1) Numerical facts and figures that are collected through some type of measurement process are called \_\_\_\_\_\_\_\_.

A) statistics

B) data

C) information

D) variables

Answer: B

Diff: 1

Blooms: Remember

Topic: Introduction

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

2) By analyzing and extracting meaning from data to support evaluation and decision making, companies gather \_\_\_\_\_\_\_\_.

A) variables

B) data

C) information

D) metrics

Answer: C

Diff: 1

Blooms: Remember

Topic: Introduction

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

3) Outcomes such as reliability, defect levels, setup times, time to market, and productivity would be considered \_\_\_\_\_\_\_\_ outcomes.

A) customer-focused

B) workforce-focused

C) product and process

D) leadership and governance

Answer: C

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Identify different business uses for statistics and the major statistical tools businesses use

4) Outcomes such as customer satisfaction and dissatisfaction, complaints and complaint resolution, and customer perceived value would be considered \_\_\_\_\_\_\_\_ outcomes.

A) customer-focused

B) workforce-focused

C) product and process

D) leadership and governance

Answer: A

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Identify different business uses for statistics and the major statistical tools businesses use

5) Outcomes such as absenteeism, turnover, safety, training effectiveness, and leadership development would be considered \_\_\_\_\_\_\_\_ outcomes.

A) customer-focused

B) workforce-focused

C) financial and market

D) leadership and governance

Answer: B

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Identify different business uses for statistics and the major statistical tools businesses use

6) Outcomes such as communication effectiveness, environmental and regulatory compliance, and organizational citizenship would be considered \_\_\_\_\_\_\_\_ outcomes.

A) customer-focused

B) workforce-focused

C) financial and market

D) leadership and governance

Answer: D

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Identify different business uses for statistics and the major statistical tools businesses use

7) Outcomes such as revenue, profit and loss, net assets, earnings per share, and new product and service introductions would be considered \_\_\_\_\_\_\_\_ outcomes.

A) customer-focused

B) workforce-focused

C) financial and market

D) leadership and governance

Answer: C

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Identify different business uses for statistics and the major statistical tools businesses use

8) Data on production output, material costs, sales, and accounts receivable, are collected by an organization through \_\_\_\_\_\_\_\_.

A) industry trade associations

B) government databases

C) Standard & Poor's Compustat data sets

D) internal record‐keeping

Answer: D

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

9) Data that are routinely collected by accounting, marketing and operations functions of a business are called \_\_\_\_\_\_\_\_.

A) nominal data

B) external data

C) internal data

D) ordinal data

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

10) Internal data might include all of the following except \_\_\_\_\_\_\_\_.

A) material costs

B) economic conditions

C) accounts receivable

D) sales.

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

11) Data on \_\_\_\_\_\_\_\_ is most likely to be collected using surveys, interviews, and focus groups.

A) customer satisfaction

B) material usage

C) sales

D) fixed input costs

Answer: A

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

12) Data that is often used by a business for comparative purposes, marketing projects, and economic analyses would be categorized as \_\_\_\_\_\_\_\_.

A) internal data

B) special studies

C) ordinal data

D) external data

Answer: D

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

13) External data may include all of the following except \_\_\_\_\_\_\_\_.

A) population trends

B) accounts receivables

C) industry performance

D) international trade data

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

14) A unit of measure that provides a way to objectively quantify performance is called a \_\_\_\_\_\_\_\_.

A) statistic

B) population

C) metric

D) data

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

15) The act of obtaining data associated with a metric is called \_\_\_\_\_\_\_\_.

A) measurement

B) population

C) information

D) evaluation

Answer: A

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

16) Numerical values associated with a metric are called \_\_\_\_\_\_\_\_.

A) data

B) measures

C) population

D) regressors

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

17) A metric that is derived from counting something is called a(n) \_\_\_\_\_\_\_\_ metric.

A) continuous

B) nominal

C) discrete

D) ordinal

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

18) Any metric involving time, volume, weight or dollars would be classified as a(n) \_\_\_\_\_\_\_\_ metric.

A) discrete

B) ordinal

C) continuous

D) binomial

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

19) All of the following are examples of a discrete metric except \_\_\_\_\_\_\_\_.

A) responses on a 5-point rating scale

B) flipping a coin

C) a person's height

D) outcome of rolling a dice

Answer: C

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

20) All of the following are examples of a continuous metric except \_\_\_\_\_\_\_\_.

A) a person's weight

B) income

C) blood pressure

D) flipping a coin

Answer: D

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

21) \_\_\_\_\_\_\_\_ data are collected over a single period of time.

A) Cross-sectional

B) Univariate

C) Time series

D) Multivariate

Answer: A

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

22) \_\_\_\_\_\_\_\_ data are collected over an extended period of time.

A) Cross-sectional

B) Univariate

C) Time series

D) Multivariate

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

23) Data that consists of a single variable is called \_\_\_\_\_\_\_\_ data.

A) cross-sectional

B) univariate

C) time series

D) multivariate

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

24) Data that consists of two or more variables is called \_\_\_\_\_\_\_\_ data.

A) cross-sectional

B) univariate

C) time series

D) multivariate

Answer: D

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

25) Data that is sorted into categories according to specified characteristics are called \_\_\_\_\_\_\_\_ data.

A) ratio

B) ordinal

C) nominal

D) interval

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

26) Data that is ordered or ranked according to some relationship to one another are called \_\_\_\_\_\_\_\_ data.

A) ratio

B) ordinal

C) nominal

D) interval

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

27) Which of the following is true of nominal data?

A) Nominal data usually have a natural order and can be ranked.

B) Nominal data are usually expressed as proportions or percentages.

C) Nominal data measure the distance between observations.

D) Nominal data has a natural zero.

Answer: B

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

28) Which of the following is true of ordinal data?

A) Ordinal data have no fixed units of measurement.

B) Ordinal data can be interpreted in the form of ratios.

C) Ordinal data allows meaningful comparison of ranges, averages, and other statistics.

D) Ordinal data is the strongest form of measurement.

Answer: A

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

29) Data that are ordered have a specified measure of the distance between observations but have no natural zero are called \_\_\_\_\_\_\_\_ data.

A) ratio

B) ordinal

C) nominal

D) interval

Answer: D

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

30) Data that has a natural zero is called \_\_\_\_\_\_\_\_ data.

A) ratio

B) ordinal

C) nominal

D) interval

Answer: A

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

31) An example of nominal data would be \_\_\_\_\_\_\_\_.

A) classifying employees by job title

B) rating a restaurant as poor, good, or very good

C) ranking customer flow by day of the week

D) comparing stores by sales in dollars

Answer: A

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

32) An example of interval data would be \_\_\_\_\_\_\_\_.

A) classifying customers by geographical region

B) rating a movie as bad, good, or excellent

C) ranking potential employees by SAT scores

D) comparing retail stores by number of units sold

Answer: C

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

33) An example of ratio data would be \_\_\_\_\_\_\_\_.

A) classifying students by college majors

B) rating a book as poor, good, or very good

C) organizing material costs by cost per unit

D) classifying stores by sales in dollars

Answer: D

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

34) An example of ordinal data would be \_\_\_\_\_\_\_\_.

A) classifying employees by job title

B) rating a restaurant as poor, good, or very good

C) organizing customer flow by day of the week

D) listing time taken per task by a worker

Answer: B

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

35) Race and ethnicity is an example of \_\_\_\_\_\_\_\_ data.

A) nominal

B) ordinal

C) interval

D) ratio

Answer: A

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

36) Zip code would be an example of \_\_\_\_\_\_\_\_ data.

A) ordinal

B) interval

C) nominal

D) ratio

Answer: C

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

37) Freshman, sophomore, junior, or senior would be examples of \_\_\_\_\_\_\_\_ data.

A) nominal

B) ordinal

C) interval

D) ratio

Answer: B

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

38) Age (in years) would be an example of \_\_\_\_\_\_\_\_ data.

A) nominal

B) ordinal

C) interval

D) ratio

Answer: D

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

39) Measures of temperature using the Fahrenheit scale is an example of \_\_\_\_\_\_\_\_ data.

A) nominal

B) ordinal

C) interval

D) ratio

Answer: C

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

40) Salary would be an example of \_\_\_\_\_\_\_\_ data.

A) nominal

B) ordinal

C) interval

D) ratio

Answer: D

Diff: 2

Blooms: Understand

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

41) The strongest and most useful form of measurement is the \_\_\_\_\_\_\_\_.

A) nominal scale

B) ordinal scale

C) ratio scale

D) interval scale

Answer: C

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

42) Which of the following principles underlie statistical thinking?

A) All work occurs in a system of interconnected processes.

B) All processes are identical without any degree of variation.

C) Better performance results from increasing variation.

D) Variations in measurement will not occur unless there are variations in the true values.

Answer: A

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

43) \_\_\_\_\_\_\_\_ is a systematic way of doing things to achieve desired results.

A) Variation

B) A measure

C) Information

D) A process

Answer: D

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

44) One of the most overlooked concepts in management decision making is \_\_\_\_\_\_\_\_.

A) symmetry in data

B) uncontrollable variation

C) technological improvements

D) theoretical reasoning

Answer: B

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

45) A \_\_\_\_\_\_\_\_ refers to all the items of interest for a particular decision or investigation.

A) class

B) sample

C) population

D) group

Answer: C

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

46) All college students in the U.S. that live on campus would be an example of a \_\_\_\_\_\_\_\_.

A) sample

B) population

C) class

D) group

Answer: B

Diff: 1

Blooms: Understand

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

47) A(n) \_\_\_\_\_\_\_\_ refers to a subset of a population.

A) measure

B) process

C) interval estimate

D) sample

Answer: D

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

48) If all the college students in this university are the population, then college students in this class that live on campus would be an example of \_\_\_\_\_\_\_\_.

A) a point estimate

B) a process

C) a sample

D) ratio data

Answer: C

Diff: 1

Blooms: Understand

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

49) \_\_\_\_\_\_\_\_ refer(s) to summary measures of population characteristics computed from samples.

A) Statistics

B) Data

C) Ordinal data

D) Decision models

Answer: A

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

50) The three major components of statistical methodology are \_\_\_\_\_\_\_\_.

A) nominal, ordinal, and interval data

B) data, information, and decisions

C) descriptive statistics, statistical inference, and predictive statistics

D) graphs, charts, and spreadsheets

Answer: C

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

51) The process of collection, organization, and description of data is called \_\_\_\_\_\_\_\_.

A) predictive statistics

B) statistical inference

C) descriptive statistics

D) decision modeling

Answer: C

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

52) The process of drawing conclusions about unknown characteristics of a population based on sample data is called \_\_\_\_\_\_\_\_.

A) predictive statistics

B) statistical inference

C) descriptive statistics

D) information gathering

Answer: B

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

53) The process of developing likely estimates of future values based on historical data is called \_\_\_\_\_\_\_\_.

A) predictive statistics

B) statistical inference

C) descriptive statistics

D) information gathering

Answer: A

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

54) Which of the following functions is used to find the smallest value in a range of cells using Microsoft Excel?

A) MAX(*range*)

B) MIN(*range*)

C) SUM(*range*)

D) AVERAGE(*range*)

Answer: B

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

55) Which of the following functions is used to find the largest value in a range of cells using Microsoft Excel?

A) MAX(*range*)

B) MIN(*range*)

C) SUM(*range*)

D) AVERAGE(*range*)

Answer: A

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

56) Which of the following is used to add values in a range of cells using Microsoft Excel?

A) ADD(*range*)

B) MIN(*range*)

C) SUM(*range*)

D) PLUS(*range*)

Answer: C

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

57) Which of the following is used to find the mean value of a range of cells using Microsoft Excel?

A) MEAN(*range*)

B) MIN(*range*)

C) SUM(*range*)

D) AVERAGE(*range*)

Answer: D

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

58) Which of the following is used to find the number of cells in a range that contains numbers using Microsoft Excel?

A) MAX(*range*)

B) COUNT(*range*)

C) SUM(*range*)

D) NUMBER(*range*)

Answer: B

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

59) Which of the following is used to find the number of cells within a range that meet specified criteria using Microsoft Excel?

A) CHECKIF(*range*)

B) COUNT(*range*)

C) SUM(*range*)

D) COUNTIF(*range, criteria*)

Answer: D

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

60) In Microsoft Excel, a function that returns TRUE if all conditions are true, and FALSE if not, is \_\_\_\_\_\_\_\_.

A) MAX(*range*)

B) COUNT(*range*)

C) AND(*condition 1, condition 2…*)

D) COUNTIF(*range, criteria*)

Answer: C

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

61) In Microsoft Excel, a logical function that returns TRUE if any condition is true, and FALSE if not, is \_\_\_\_\_\_\_\_.

A) OR(*condition 1, condition 2 . . .*)

B) IF(*condition, value if true, value if false*)

C) VLOOKUP(*value, table range, column number*)

D) COUNTIF(*range, criteria*)

Answer: A

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

62) In Microsoft Excel, a logical function that returns one value if the condition is true and another if the condition is false, is \_\_\_\_\_\_\_\_.

A) OR(*condition 1, condition 2 . . .*)

B) IF(*condition, value if true, value if false*)

C) VLOOKUP(*value, table range, column number*)

D) AND(*condition 1, condition 2…*)

Answer: B

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

63) In Microsoft Excel, the function that looks up a value in a table is \_\_\_\_\_\_\_\_.

A) AVERAGE(*condition 1, condition 2 . . .*)

B) IF(*condition, value if true, value if false*)

C) VLOOKUP(*value, table range, column number*)

D) COUNTIF(*range, criteria*)

Answer: C

Diff: 1

Blooms: Remember

Topic: Using Microsoft Excel

Learning Outcome: Use a modern software tool to perform statistical calculations

64) In Microsoft Excel, the chart that compares values across categories using vertical rectangles, is called a \_\_\_\_\_\_\_\_.

A) clustered column chart

B) stacked column chart

C) 100% stacked column chart

D) bar chart

Answer: A

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

65) In Microsoft Excel, the chart that displays the contributions of each value to the total by stacking the rectangles is called a \_\_\_\_\_\_\_\_.

A) stacked bar chart

B) stacked column chart

C) stacked histogram

D) stacked line chart

Answer: B

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

66) In Microsoft Excel, the chart that compares the percentage that each value contributes to a total is called a \_\_\_\_\_\_\_\_.

A) clustered column chart

B) stacked column chart

C) 100% stacked column chart

D) bar chart

Answer: C

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

67) In Microsoft Excel, the chart that is used to plot prices of shares, such as the daily high, low, and close, is a \_\_\_\_\_\_\_\_.

A) surface chart

B) doughnut chart

C) bubble chart

D) stock chart

Answer: D

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

68) In Microsoft Excel, the \_\_\_\_\_\_\_\_ chart is used to show three-dimensional data.

A) stock

B) surface

C) doughnut

D) bubble

Answer: B

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

69) In Microsoft Excel, the \_\_\_\_\_\_\_\_ chart is similar to the pie chart but can contain more than one data series.

A) stock

B) surface

C) doughnut

D) bubble

Answer: C

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

70) In Microsoft Excel, a type of scatter chart in which the size of the data marker corresponds to the value of a third variable, is called a \_\_\_\_\_\_\_\_.

A) stock chart

B) surface chart

C) doughnut chart

D) bubble chart

Answer: D

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

71) Data can be distorted by \_\_\_\_\_\_\_\_.

A) manipulating the scale

B) using more than one chart or graph

C) presenting data in different units of measurement

D) using two-dimensional charts

Answer: A

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

72) Which of the following is the best chart for displaying U.S. exports to Europe over 20 years (in billions of dollars)?

A) pie chart

B) line chart

C) area chart

D) scatter diagram

Answer: B

Diff: 1

Blooms: Understand

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

73) Which of the following is the best chart for displaying the most popular pizza topping among a group of college students?

A) line chart

B) area chart

C) pie chart

D) scatter diagram

Answer: C

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

74) Which of the following is the best chart for displaying the consumption of fossil fuels as a proportion of total energy consumption?

A) column chart

B) area chart

C) line chart

D) scatter diagram

Answer: B

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

75) Which of the following is the best chart for displaying a comparison between house size (in square feet) versus the home market value (in dollars)?

A) pie chart

B) line chart

C) area chart

D) scatter diagram

Answer: D

Diff: 1

Blooms: Remember

Topic: Displaying Data with Excel Charts

Learning Outcome: Compare and contrast tools for presenting and organizing data

76) Data are rarely used in the business environment as firms prefer using information.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

77) Mean, median, and mode are examples of raw data collected by firms.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Data in the Business Environment

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

78) Obtaining ratio data is usually more expensive than obtaining categorical data.

Answer: TRUE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

79) Metrics can be either discrete, ratio, or continuous.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

80) Discrete data are usually easier to capture and record, but provide less information than continuous data.

Answer: TRUE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

81) Nominal data have a specified measure of the distance between observations, but no natural zero.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

82) Data from survey scales would be considered ordinal data.

Answer: TRUE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

83) A ratio scale is a strong form of measurement but not the strongest.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Sources and Types of Data

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

84) When making important decisions variation should not be considered.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

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85) Six-Sigma is based on a statistical measure that equates to 3.4 or fewer errors or defects per million opportunities.

Answer: TRUE

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

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86) Capturing information about a population is often times more cost effective than sampling.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

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87) In business, statistical methods are used to present data in a concise and understandable manner and to estimate population characteristics.

Answer: TRUE

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

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88) Descriptive statistics refers to the process of drawing conclusions about unknown characteristics of a population based on sample data.

Answer: FALSE

Diff: 1

Blooms: Remember

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89) Predictive statistics are developed using historical data in order to forecast future values.

Answer: TRUE

Diff: 1

Blooms: Remember

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90) It is not possible to manipulate statistical displays to suit the creator's conclusions.

Answer: FALSE

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

91) Explain the difference between data and information.

Answer: Data are raw numerical facts and figures, and information comes from analyzing and organizing data to support evaluation and decision making.

Diff: 1

Blooms: Remember

Topic: Introduction

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

92) Explain the difference between and give examples of both a population and a sample. Also explain when it would be more beneficial to collect sample data over population data.

Answer: A population can be anything that one defines it to be. It consists of all items of interest, for example, all undergraduate students in the U.S. A sample is a subset of the population, for example, undergraduate students attending a specific university. It would be more beneficial to collect sample data when complete information about a population is difficult or impossible to obtain such as when the desired population spans nationwide and the firm is working on a low budget.

Diff: 1

Blooms: Remember

Topic: Statistical Thinking

Learning Outcome: Explain how data is acquired and distinguish among different types of data and levels of measurement

93) Explain the difference between categorical, ordinal, interval, and ratio data. Give an example for each.

Answer: Categorical data are sorted into categories according to specified characteristics. The categories bear no quantitative relationship to one another, for example, gender. Ordinal data are ordered in rank according to some relationship to one another; they are categorical but also have a natural order. An example would be the separation of students based on class (freshman, sophomore, junior, senior). Interval data are ordered, have a specified measure of distance between observations but have no natural zero. Interval data allow meaningful comparison of ranges, averages and other statistics where ordinal data do not. The difference between the two values are meaningful, however, the ratio is not. SAT scores are an example of interval data. Ratio data are hierarchical in that each level includes all of the information content of the one preceding it. Ratio data have a natural zero where interval data do not. Both difference and ratio of two values are meaningful. Salaries in dollars are an example of ratio data.

Diff: 1

Blooms: Remember

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