

TEST ITEM FILE

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BUSINESS STATISTICS A DECISION-MAKING APPROACH TENTH EDITION

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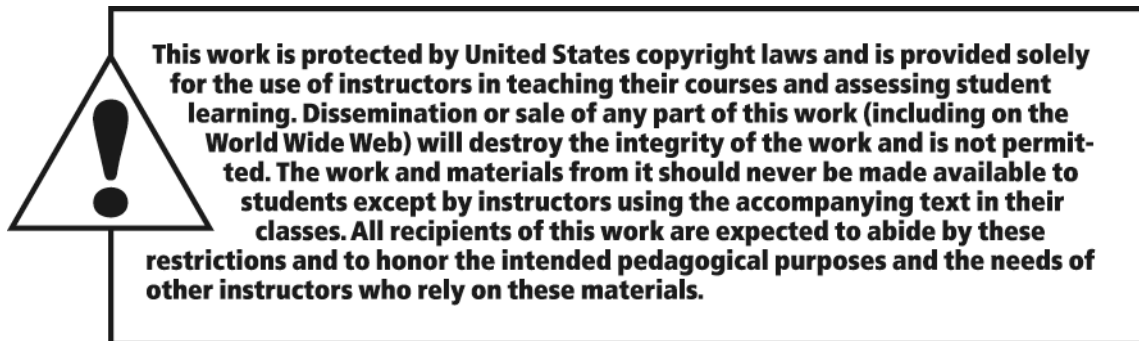
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Business Statistics, 9e (Groebner/Shannon/Fry)

Chapter 1 The Where, Why, and How of Data Collection

1) Statistics is a discipline that involves tools and techniques used to describe data and draw conclusions.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

2) In this course, the term *business statistics* refers to the set of tools and techniques that are used to convert information into meaningful data.

Answer: FALSE

Diff: 1

Keywords: descriptive statistics and/or inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

3) Descriptive statistics allow a decision maker to reach a conclusion about a population based on a subset from the population.

Answer: FALSE

Diff: 2

Keywords: descriptive statistics and/or inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

4) An accountant has recently prepared a report for a client that contains a variety of graphs and charts. In doing so, she has used descriptive statistical methods.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

5) Descriptive statistical tools include graphs, charts, and numerical measures.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

6) A histogram is an example of a numerical measure.

Answer: FALSE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

7) Companies frequently use charts and graphs in their regular communications with stockholders and investors; this shows the use of descriptive statistics.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

8) A manufacturing manager has developed a table that shows the average production volume each day for the past three weeks. The average production level is an example of a numerical measure.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

9) An accountant who recently examined 200 accounts from a company's total of 4,000 accounts in an effort to estimate the percentage of all accounts that have incorrect journal entries is using descriptive statistical analysis to reach the conclusion.

Answer: FALSE

Diff: 2

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

10) The editor of a local newspaper is interested in determining the percentage of subscribers who read the paper's editorials. The statistical technique that he would use is called estimation.

Answer: TRUE

Diff: 2

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

11) Hypothesis testing and estimation are two statistical tools that are used to draw inferences about a large data set based on a subset of the data.

Answer: TRUE

Diff: 1

Keywords: inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

12) Another term for the arithmetic average is the mean.

Answer: TRUE

Diff: 1

Keywords: descriptive statistics, mean

Section: 1-1 What Is Business Statistics?

Outcome: none

13) Statistical inference would be used as the primary statistical tool by a quality control manager who wishes to estimate the average weight of her company's products.

Answer: TRUE

Diff: 2

Keywords: inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

14) A light bulb manufacturer wants to advertise the average life of its light bulbs so it tests a subset of light bulbs. This is an example of inferential statistics.

Answer: TRUE

Diff: 2

Keywords: inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

15) A sales manager has five salespeople. The following are the number of units sold by the five salespeople during the past week: {5, 13, 6, 2, 4}. Based on the data, the mean number of units sold was 6 units.

Answer: TRUE

Diff: 2

Keywords: descriptive statistics, mean

Section: 1-1 What Is Business Statistics?

Outcome: none

16) Some of the most common methods of collecting data include experiments, telephone surveys, mail questionnaires, direct observations, and personal interviews.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

17) An experiment is a process that generates data as its outcome.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

18) Experimental design is a plan for performing an experiment where the effects of one or more factors on the variable of interest are measured.

Answer: TRUE

Diff: 2

Keywords: data collection, experiments

Section: 1-2 Procedures for Collecting Data

Outcome: 1

19) Typically, it is possible to include a larger number of questions in a phone survey than in a mail survey since it takes less time to complete the survey over the phone.

Answer: FALSE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

20) An Internet-based or emailed survey is not an alternative method of data collection.

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

21) An open-end question requires respondents to choose from a short list of choices

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

22) A short survey with closed-end questions is likely to have a better response rate than a long survey with open-ended questions.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

23) The Cranston Company recently met with a group of its customers to ask questions about the service and products provided by the company. The data collected in this process would be an example of data collected through direct observation.

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

24) The Georgia Company, a pharmaceutical company, recently conducted a study in which 20 people were given a new drug and 20 other people were given a placebo. The objective was to determine whether there was a difference in pain relief between those using the new drug versus those using the placebo. The data collection used here is an example of an experiment.

Answer: TRUE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

25) When comparing experiments, surveys, and direct observation as methods of data collection, the method that would typically be the least expensive is surveys.

Answer: TRUE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

26) Assuming that you are planning to collect data using an experiment, it will be very important to establish an appropriate survey design.

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

27) Mail questionnaires typically generate poor response rates.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

28) In an unstructured interview the questions are scripted.

Answer: FALSE

Diff: 1

Keywords: data collection, interviews

Section: 1-2 Procedures for Collecting Data

Outcome: 1

29) One way to improve the response rate for a survey is to administer the surveys directly to the respondents.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

30) On a survey, the questions pertaining to the background of the respondent (age, gender, etc.) are referred to as demographic questions.

Answer: TRUE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

31) When an interviewer asks a specified series of questions in the course of a personal interview, he/she is conducting an unstructured interview.

Answer: FALSE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

32) The marketing division of a company is interested in determining whether increased advertising will increase sales in three of its target cities. Three levels of advertising are used and the sales are recorded for the month immediately following the ads. In this case, the data are considered to have been collected using an experiment.

Answer: TRUE

Diff: 2

Keywords: data collection, survey

Section: 1-2 Procedures for Collecting Data

Outcome: 1

33) Data collected using open-end questions is generally easier to analyze than data collected from closed-end questions.

Answer: FALSE

Diff: 1

Keywords: data collection, survey

Section: 1-2 Procedures for Collecting Data

Outcome: 1

34) One of the advantages of data check sheets is that as the data are being recorded, they are also being displayed in a useful format.

Answer: TRUE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

35) The primary purpose of performing a pre-test when developing a telephone or mail survey is to make sure that the respondents can understand the questions and are able to provide meaningful responses.

Answer: TRUE

Diff: 2

Keywords: data collection, protest

Section: 1-2 Procedures for Collecting Data

Outcome: 1

36) Close-end questions provide the greatest opportunity to obtain ideas and thoughts on the part of those surveyed but the resulting data are more difficult to analyze.

Answer: FALSE

Diff: 1

Keywords: data collection, survey

Section: 1-2 Procedures for Collecting Data

Outcome: 1

37) Questions on a written survey dealing with the characteristics of the respondent (age, income, etc.) are referred to as categorical questions.

Answer: FALSE

Diff: 2

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

38) Open-end questions are typically included in a survey when the objective is to provide the maximum opportunity for the respondent to express his or her opinion.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

39) The method of data collection called direct observation is always associated with gathering data from people.

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

40) Data gathered from a structured interview is generally easier to analyze than data collected from an unstructured interview.

Answer: TRUE

Diff: 1

Keywords: data collection, structured interview

Section: 1-2 Procedures for Collecting Data

Outcome: 1

41) When a survey is done you can always assume that non-respondents would have answered the same way as those who did respond.

Answer: FALSE

Diff: 2

Keywords: data collection, nonresponse bias

Section: 1-2 Procedures for Collecting Data

Outcome: 1

42) When a company scans the bar codes on its products in an effort to count the number of products that remain in inventory, the company is collecting data through experimentation.

Answer: FALSE

Diff: 2

Keywords: data collection, UPC

Section: 1-2 Procedures for Collecting Data

Outcome: 1

43) Data collected on the Internet can generally be considered accurate since the data must go through a screening process before they can be placed on the Internet.

Answer: FALSE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

44) It is possible for an interviewer to interject bias into the data collection project by the way he or she asks the questions.

Answer: TRUE

Diff: 1

Keywords: data collection, bias

Section: 1-2 Procedures for Collecting Data

Outcome: 1

45) When people fail to respond to a survey, the data collection process may suffer from nonresponse bias.

Answer: TRUE

Diff: 1

Keywords: data collection

Section: 1-2 Procedures for Collecting Data

Outcome: 1

46) Selection bias occurs when the respondent decides which of the questions on the survey to answer.

Answer: FALSE

Diff: 2

Keywords: data collection, bias

Section: 1-2 Procedures for Collecting Data

Outcome: 1

47) Recently, an analyst in a company's marketing department surveyed customers regarding how often they buy a particular product. One customer indicated that she purchased the product 17 times in the last six months, but the analyst recorded the response as 71 times. This is an example of observer bias.

Answer: FALSE

Diff: 2

Keywords: data collection, bias

Section: 1-2 Procedures for Collecting Data

Outcome: 1

48) When the United States conducts a census that counts all people in the country, this is an example of using a sample.

Answer: FALSE

Diff: 1

Keywords: population, sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 2

49) When the marketing manager for a large company surveys a portion of the total customers of his company, he is using a sample from the population.

Answer: TRUE

Diff: 1

Keywords: sample, population

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 2

50) A census is an enumeration of the entire sample of items selected from the population of interest.

Answer: FALSE

Diff: 2

Keywords: sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 2

51) A sample is selected from a population in cases where selecting data from the entire population is either very difficult or very expensive.

Answer: TRUE

Diff: 1

Keywords: sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 2

52) A parameter is the boundary on the population of interest.

Answer: FALSE

Diff: 1

Keywords: parameter, population

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

53) Population parameters are descriptive numerical measures, such as an average, that describe the entire population.

Answer: TRUE

Diff: 1

Keywords: parameter

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

54) Statistics are measures computed from the entire population of data.

Answer: FALSE

Diff: 1

Keywords: statistics

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 2

55) When the production manager selects a sample of items that have been produced on her production line and computes the proportion of those items that are defective, the proportion is referred to as a statistic.

Answer: TRUE

Diff: 2

Keywords: statistics, proportion

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

56) The First National Bank mailed out a survey to all 3,456 savings account customers. A total of 568 surveys were returned. Values computed from the returned surveys would constitute parameters since all 568 customers were surveyed.

Answer: FALSE

Diff: 2

Keywords: parameter, statistic

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

57) If an analyst computes statistics from a sample, the sample is by definition a statistical sample.

Answer: FALSE

Diff: 2

Keywords: sample, statistic

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

58) When university newspaper reporters take a poll of students by standing outside of the nearest pub to survey students about the university offering upgraded food options, the sampling method used is called a random sample.

Answer: FALSE

Diff: 2

Keywords: convenience sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

59) A pharmaceutical company conducts a study where 50 patients are given a drug. They find that 10 percent of patients experience nausea as a side effect. This 10 percent is an example of a parameter.

Answer: FALSE

Diff: 2

Keywords: parameter, statistic

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

60) It is possible for a nonstatistical sample to yield statistics that have values closer to the corresponding parameter than will a statistical sample.

Answer: TRUE

Diff: 3

Keywords: nonstatistical sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

61) One of the most common statistical sampling techniques is convenience sampling.

Answer: FALSE

Diff: 2

Keywords: convenience sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

62) Possibly the most frequently used nonstatistical sampling procedure is the simple random sample.

Answer: FALSE

Diff: 1

Keywords: simple random sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

63) A common underpinning of all statistical sampling techniques is the concept of random selection.

Answer: TRUE

Diff: 1

Keywords: random sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

64) Simple random sampling involves selecting members of the population in such a way that all members are equally likely to be chosen.

Answer: TRUE

Diff: 1

Keywords: sampling techniques

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

65) When stratified random sampling is employed, the population is divided into homogeneous subgroups called strata.

Answer: TRUE

Diff: 2

Keywords: stratified random sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

66) In election years, the polls that are conducted by such companies as Gallup and Harris typically employ stratified random sampling to reduce the number of people that will need to be surveyed.

Answer: TRUE

Diff: 2

Keywords: stratified random sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

67) If a state agency wishes to conduct on-site surveys of small businesses throughout the state, cluster sampling could potentially be used to reduce the geographical area over which the surveys would need to be conducted.

Answer: TRUE

Diff: 2

Keywords: cluster sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

68) Cluster sampling is the same thing as stratified random sampling.

Answer: FALSE

Diff: 1

Keywords: sampling techniques

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

69) When a small sample is used, a stratified random sample is more likely to provide the desired information than a simple random sample.

Answer: TRUE

Diff: 2

Keywords: sampling techniques

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

70) Suppose a professor collects survey data by passing out surveys in his/her classes, where the population of interest is defined as all students enrolled at that university. This is an example of nonstatistical sampling technique.

Answer: TRUE

Diff: 2

Keywords: sampling techniques

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

71) One of the reasons that managers prefer statistical sampling to nonstatistical sampling is that statistical sampling is generally easier to perform and less expensive.

Answer: FALSE

Diff: 2

Keywords: statistical sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

72) A market research firm that surveys customers in a shopping mall by asking various people to respond to a short survey about a new product is performing convenience sampling.

Answer: TRUE

Diff: 2

Keywords: convenience sample

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

73) If a population is very large, it may be better to select a sample from the population than to try to obtain a census in an effort to reduce measurement error.

Answer: TRUE

Diff: 2

Keywords: measurement error, data collection

Section: 1-3 Populations, Samples and Sampling Techniques

Outcome: 3

74) The sales data for a company measured in the week following an increased ad campaign would be considered cross-sectional data.

Answer: TRUE

Diff: 1

Keywords: data type, cross-sectional

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

75) When students are asked to list their age and the percentage of their college expenses that they pay for themselves, the type of data being collected is quantitative.

Answer: TRUE

Diff: 2

Keywords: data type, quantitative

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

76) It is possible for the same survey questionnaire to yield both quantitative and qualitative data.

Answer: TRUE

Diff: 1

Keywords: data type, quantitative, qualitative

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

77) Sales data measured each week for the past twenty weeks are examples of time-series data.

Answer: TRUE

Diff: 1

Keywords: data type, time series

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

78) Recording vehicle type as sedan, minivan, pick-up truck, etc. is an example of qualitative data.

Answer: TRUE

Diff: 1

Keywords: data type

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

79) When customers return a product to a store and the store asks the customer to indicate the reason that the merchandise was returned, the resulting data are quantitative since multiple people will be providing the data.

Answer: FALSE

Diff: 2

Keywords: data type, qualitative

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

80) Nominal data is the highest level of data.

Answer: FALSE

Diff: 1

Keywords: measurement levels

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

81) At the end of the school term, students are asked to rate the course and instructor by indicating on a scale of 1-5 how well they liked the course. The data generated from this question are examples of ordinal data.

Answer: TRUE

Diff: 2

Keywords: data type, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

82) On a survey, amount of education is recorded as some high school, high school graduate, some college, college graduate, etc. This is an example of ordinal data.

Answer: TRUE

Diff: 1

Keywords: measurement levels

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

83) A variable, i.e., the length of time it takes for an employee to complete an assembly procedure at an automotive plant, is a ratio level variable.

Answer: TRUE

Diff: 2

Keywords: levels of measurement, ratio

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

84) A variable that has all the properties of an interval variable, but also has a true zero, is a ratio level variable.

Answer: TRUE

Diff: 2

Keywords: levels of measurement, ratio

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

85) Cross-sectional data is a set of data values observed at successive points in time.

Answer: FALSE

Diff: 1

Keywords: data type, time series

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

86) Data collected on marital status (married, divorced, single, other) would be an ordinal level variable.

Answer: FALSE

Diff: 2

Keywords: data type, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

87) Recently, a bank manager pulled a sample of customer accounts and recorded data for two variables, checking account balance and total number of transactions during the previous 30 days. The data collected would be considered time-series data.

Answer: FALSE

Diff: 2

Keywords: data type, time series

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

88) Flavors of ice cream (chocolate, vanilla, strawberry, etc.) are an example of nominal data.

Answer: TRUE

Diff: 1

Keywords: measurement levels

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

89) A major fast-food chain has installed a device that measures the temperature of the hamburgers on the grill. These data are stored in a computer file. If you were to analyze these data, you would be working with ordinal level data.

Answer: TRUE

Diff: 2

Keywords: levels of measurement, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

90) The difference between interval data and ratio data is that interval data has a natural zero.

Answer: FALSE

Diff: 2

Keywords: measurement levels

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

91) If you have an ordinal variable, it is possible to precisely measure the magnitude of the difference between the possible values of the variable.

Answer: FALSE

Diff: 3

Keywords: levels of measurement, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

92) A cell phone service provider has 14,000 customers. Recently, the sales department selected a random sample of 400 customer accounts and recorded the number of minutes of long distance time used during the previous billing period. The data for this variable is considered to be nominal since the values are based on sample data.

Answer: FALSE

Diff: 2

Keywords: levels of measurement, nominal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

93) A cell phone service provider has 14,000 customers. Recently, the sales department selected a random sample of 400 customer accounts and recorded the number of minutes of long distance time used during the previous billing period. The company analyst used Excel to sort these values in order from high to low. She then assigned the highest value a rank of 1, the next highest value a rank of 2, and so forth. These ranks would be considered to be ordinal data.

Answer: TRUE

Diff: 2

Keywords: levels of measurement, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

94) A survey conducted by a local real estate agency asked respondents to indicate whether they preferred natural gas, electric, or oil furnaces for heating their home. The data collected for this variable would be of ordinal level.

Answer: FALSE

Diff: 2

Keywords: levels of measurement, ordinal

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

95) A small engine repair shop tracks the number of customers who call each day. This variable is a time-series variable and also ratio level.

Answer: TRUE

Diff: 2

Keywords: levels of measurement, time series, ratio

Section: 1-4 Data Types and Data Measurement Levels

Outcome: 4

96) The use of charts and graphs is an example of:

A) descriptive statistics.

B) inferential statistics.

C) estimation.

D) hypothesis testing.

Answer: A

Diff: 1

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

97) When an administrator at a local hospital prepares a series of charts and graphs pertaining to the patients that have stayed at the hospital during the past month, she is using which general category of statistical analysis?

A) Quantitative statistics

B) Inferential statistics

C) Descriptive statistics

D) Random sampling

Answer: C

Diff: 2

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

98) Which of the following is an example of graphs used to describe data?

A) Histograms

B) Bar charts

C) Both A and B are correct.

D) None of the above.

Answer: C

Diff: 1

Keywords: descriptive statistics, graphs

Section: 1-1 What Is Business Statistics?

Outcome: none

99) When a marketing manager surveys a few of the customers for the purpose of drawing a conclusion about the entire list of customers, she is applying:

- A) inferential statistics.
- B) descriptive statistics.
- C) quantitative models.
- D) numerical measures.

Answer: A

Diff: 1

Keywords: inferential statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

100) When the park ranger at Yellowstone National Park reports the average length of time that visitors spend in the park, he is using:

- A) graphical tools.
- B) numerical measures.
- C) statistical charts.
- D) histograms or bar charts.

Answer: B

Diff: 2

Keywords: descriptive statistics

Section: 1-1 What Is Business Statistics?

Outcome: none

101) A car manufacturer stated in its advertising that the gas mileage for its hybrids will be greater than 40 mpg on average. A consumer agency tested a sampling of the hybrids under a variety of conditions. Based on these tests, the agency concluded that the manufacturer was justified in making this claim. The process described is an example of:

- A) descriptive statistics.
- B) hypothesis testing.
- C) statistical inference.
- D) Both B and C are correct.

Answer: D

Diff: 2

Keywords: descriptive statistics, inferential statistics, hypothesis testing

Section: 1-1 What Is Business Statistics?

Outcome: none