Exam

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the 4 methods of data collection is involved when a person counts the number of cars passing designated locations on the Los Angeles freeway system? 1) _____

A) observation
B) published sources
C) experimentation
D) surveying

Answer: A
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

2) Referring to Table 1-1, the possible responses to the question "How many videocassette recorders made by other manufacturers have you used?" result in 2) _____

A) an ordinal scale variable.
B) a ratio scale variable.
C) a nominal scale variable.
D) an interval scale variable.

Answer: B
Explanation: A)
B)
C)
D)

3) The British Airways Internet site provides a questionnaire instrument that can be answered electronically. Which of the 4 methods of data collection is involved when people complete the questionnaire? 3) _____

A) surveying
B) observation
C) experimentation
D) published sources

Answer: A
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

4) Referring to Table 1-1, the possible responses to the question "What is your annual income rounded to the nearest thousands?" result in 4) _____
A) a nominal scale variable.
B) an ordinal scale variable.
C) a ratio scale variable.
D) an interval scale variable.

Answer: C
Explanation: A)
B)
C)
D)

5) Referring to Table 1-1, the population of interest is 5) _____
A) all the customers who have bought a videocassette recorder made by the company and brought it in for repair over the past 12 months.
B) all the customers who have ever bought a videocassette recorder made by the company.
C) all the customers who have bought a videocassette recorder made by the company over the past 12 months.
D) all the customers who have used a videocassette recorder over the past 12 months.

Answer: C
Explanation: A)
B)
C)
D)

6) Referring to Table 1-1, the possible responses to the question "How many videocassette recorders made by other manufacturers have you used?" are values from a 6) _____
A) continuous random variable.
B) discrete random variable.
C) parameter.
D) categorical random variable.

Answer: B
Explanation: A)
B)
C)
D)

7) The chancellor of a major university was concerned about alcohol abuse on her campus and wanted to find out the proportion of students at her university who visited campus bars on the weekend before the final exam week. Her assistant took a random sample of 250 students. The portion of students in the sample who visited campus bars on the weekend before the final exam week is an example of 7) _____
A) a continuous random variable.
B) a parameter.
C) a discrete random variable.
D) a categorical random variable.

Answer: A
Explanation: A)
B)
C)
D)

8) The process of using sample statistics to draw conclusions about true population parameters is called 8) _____

A) the scientific method. B) descriptive statistics.
C) statistical inference. D) sampling.

Answer: C
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

9) Referring to Table 1-1, the possible responses to the question "How much time do you use the videocassette recorder every week on the average?" are values from a 9) _____

A) continuous numerical random variable. B) discrete numerical random variable.
C) categorical random variable. D) parameter.

Answer: A
Explanation: A)
B)
C)
D)

10) Referring to Table 1-1, the possible responses to the question "How many people are there in your household?" are values from a 10) _____

A) continuous numerical random variable. B) categorical random variable.
C) parameter. D) discrete numerical random variable.

Answer: D
Explanation: A)
B)
C)
D)

11) A marketing research firm, in conducting a comparative taste test, provided three types of peanut butter to a sample of households randomly selected within the state. Which of the 4 methods of data collection is involved when people are asked to compare the three types of peanut butter? 11) _____

A) published sources B) surveying
C) experimentation D) observation

Answer: C
Explanation: A)
B)
C)
D)

12) The average number of units earned per semester by college students is suspected to be rising. A researcher at Calendula College wishes to estimate the number of units earned by students during the spring semester at Calendula. To do so, he randomly selects 100 student transcripts and records the number of units each student earned in the spring term. Identify the variable of interest to the researcher. 12) _____

A) the average indebtedness of Calendula College students enrolled in the spring
B) the age of Calendula College students enrolled in the spring
C) the number of students enrolled at Calendula College during the spring term
D) the number of units earned by Calendula College students during the spring term

Answer: D
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

13) Referring to Table 1-1, the possible responses to the question "What brand of videocassette recorder did you purchase?" result in 13) _____

A) an interval scale variable.
B) a ratio scale variable.
C) an ordinal scale variable.
D) a nominal scale variable.

Answer: D
Explanation: A)
B)
C)
D)

14) Which of the following is most likely a population as opposed to a sample? 14) _____

A) the first 5 students completing an assignment
B) every third person to arrive at the bank
C) respondents to a newspaper survey
D) registered voters in a county

Answer: D
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

15) Referring to Table 1-1, the possible responses to the question "What is your annual income rounded to the nearest thousands?" are values from a 15) _____

A) categorical random variable.
B) parameter.
C) discrete numerical random variable.
D) continuous numerical random variable.

Answer: C
Explanation: A)
B)
C)
D)

16) Which of the following is a discrete quantitative variable? 16) _____

A) the volume of water released from a dam
B) the number of employees of an insurance company
C) the distance you drove yesterday.
D) the Dow Jones Industrial Average

Answer: B
Explanation: A)
B)
C)
D)

17) Which of the following is most likely a parameter as opposed to a statistic? 17) _____

A) the proportion of trucks stopped yesterday that were cited for bad brakes
B) the average score of the first five students completing an assignment
C) the proportion of females registered to vote in a county
D) the average height of people randomly selected from a database

Answer: C
Explanation: A)
B)
C)
D)

18) The estimation of the population average family expenditure on food based on the sample average expenditure of 1,000 families is an example of 18) _____

A) a parameter.
B) descriptive statistics.
C) a statistic.
D) inferential statistics.

Answer: D
Explanation: A)
B)
C)
D)

19) A study is under way in Yosemite National Forest to determine the adult height of American pine trees. Specifically, the study is attempting to determine what factors aid a tree in reaching heights greater than 60 feet tall. It is estimated that the forest contains 25,000 adult American pines. The study involves collecting heights from 250 randomly selected adult American pine trees and analyzing the results. Identify the sample in the study. 19) _____

A) the 250 randomly selected adult American pine trees
B) all the adult American pine trees taller than 60 feet
C) all American pine trees, of any age, in the forest
D) the 25,000 adult American pine trees in the forest

Answer: A
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

20) Referring to Table 1-1, the possible responses to the question "Out of a 100 point score with 100 being the highest and 0 being the lowest, what is your satisfaction level on the videocassette recorder that you purchased?" are values from a 20) _____

A) continuous numerical random variable. B) parameter.
C) discrete numerical random variable. D) categorical random variable.

Answer: C
Explanation: A)
B)
C)
D)

21) The universe or "totality of items or things" under consideration is called 21) _____

A) a parameter. B) a sample. C) a statistic. D) a population.

Answer: D
Explanation: A)
B)
C)
D)

22) A summary measure that is computed to describe a characteristic of an entire population is called 22) _____

A) a statistic. B) a parameter.
C) the scientific method. D) a census.

Answer: B
Explanation: A)
B)
C)
D)

23) Jared was working on a project to look at global warming and accessed an Internet site where he captured average global surface temperatures from 1866. Which of the four methods of data collection was he using? 23) _____

A) experimentation
B) published sources
C) surveying
D) observation

Answer: B
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

24) Referring to Table 1-1, the possible responses to the question "In which year were you born?" result in 24) _____

A) a nominal scale variable.
B) an interval scale variable.
C) an ordinal scale variable.
D) a ratio scale variable.

Answer: B
Explanation: A)
B)
C)
D)

25) The collection and summarization of the socioeconomic and physical characteristics of the employees of a particular firm is an example of 25) _____

A) a statistic.
B) a parameter.
C) descriptive statistics.
D) inferential statistics.

Answer: C
Explanation: A)
B)
C)
D)

26) Tim was planning for a meeting with his boss to discuss a raise in his annual salary. In preparation, he wanted to use the Consumer Price Index to determine the percentage increase in his real (inflation-adjusted) salary over the last three years. Which of the 4 methods of data collection was involved when he used the Consumer Price Index? 26) _____

A) experimentation
B) surveying
C) observation
D) published sources

Answer: D
Explanation: A)
B)
C)
D)

27) A study is under way in Yosemite National Forest to determine the adult height of American pine trees. Specifically, the study is attempting to determine what factors aid a tree in reaching heights greater than 60 feet tall. It is estimated that the forest contains 25,000 adult American pines. The study involves collecting heights from 250 randomly selected adult American pine trees and analyzing the results. Identify the variable of interest in the study. 27) _____

A) the species of trees in Yosemite National Forest
B) the age of an American pine tree in Yosemite National Forest
C) the number of American pine trees in Yosemite National Forest
D) the height of an American pine tree in Yosemite National Forest

Answer: D
Explanation: A)
B)
C)
D)

28) To monitor campus security, the campus police office is taking a survey of the number of students in a parking lot each 30 minutes of a 24-hour period with the goal of determining when patrols of the lot would serve the most students. If X is the number of students in the lot each period of time, then X is an example of 28) _____

A) a categorical random variable.
B) a statistic.
C) a discrete random variable.
D) a continuous random variable.

Answer: C
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

29) Referring to Table 1-1, the possible responses to the question "How many people are there in your household?" result in 29) _____

A) an ordinal scale variable.
B) an interval scale variable.
C) a nominal scale variable.
D) a ratio scale variable.

Answer: D
Explanation: A)
B)
C)
D)

30) Referring to Table 1-1, the possible responses to the question "Are you happy, indifferent, or unhappy with the performance per dollar spent on the videocassette recorder?" are values from a 30) _____

A) continuous numerical random variable.
B) discrete numerical random variable.
C) parameter.
D) categorical random variable.

Answer: D
Explanation: A)
B)
C)
D)

31) Most analysts focus on the cost of tuition as the way to measure the cost of a college education. But incidentals, such as textbook costs, are rarely considered. A researcher at Drummand University wishes to estimate the textbook costs of first-year students at Drummand. To do so, she monitored the textbook cost of 250 first-year students and found that their average textbook cost was $300 per semester. Identify the variable of interest to the researcher. 31) _____

A) the age of Drummand University students
B) the cost of incidental expenses of Drummand University students
C) the year in school of Drummand University students
D) the textbook cost of first-year Drummand University students

Answer: D
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

32) Referring to Table 1-1, the possible responses to the question "How would you rate the quality of your purchase experience with 1 = excellent, 2 = good, 3 = decent, 4 = poor, 5 = terrible?" are values from a 32) _____

A) continuous numerical random variable.
B) categorical random variable.
C) parameter.
D) discrete numerical random variable.

Answer: B
Explanation: A)
B)
C)
D)

33) Referring to Table 1-1, the possible responses to the question "How much time do you use the videocassette recorder every week on the average?" result in 33) _____

A) an interval scale variable.
B) a nominal scale variable.
C) a ratio scale variable.
D) an ordinal scale variable.

Answer: C
Explanation: A)
B)
C)
D)

34) Researchers are concerned that the weight of the average American school child is increasing implying, among other things, that children's clothing should be manufactured and marketed in larger sizes. If *X* is the weight of school children sampled in a nationwide study, then *X* is an example of 34) _____

A) a discrete random variable.
B) a parameter.
C) a continuous random variable.
D) a categorical random variable.

Answer: C
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

35) Referring to Table 1-1, the possible responses to the question "How would you rate the quality of your purchase experience with 1 = excellent, 2 = good, 3 = decent, 4 = poor, 5 = terrible?" result in 35) _____

A) an ordinal scale variable.
B) a ratio scale variable.
C) a nominal scale variable.
D) an interval scale variable.

Answer: A
Explanation: A) The rating is ordinal scale not interval scale because the difference in rating between "excellent" and "good" does not have to be the same as the difference between "poor" and "terrible."
B)
C)
D)

36) The personnel director at a large company studied the eating habits of the company's employees. The director noted whether employees brought their own lunches to work, ate at the company cafeteria, or went out to lunch. The goal of the study was to improve the food service at the company cafeteria. This type of data collection would best be considered as 36) _____

A) a quota sample.
B) a random sample.
C) a designed experiment.
D) an observational study.

Answer: D
Explanation: A)
B)
C)
D)

37) The chancellor of a major university was concerned about alcohol abuse on her campus and wanted to find out the proportion of students at her university who visited campus bars on the weekend before the final exam week. Her assistant took a random sample of 250 students and computed the portion of students in the sample who visited campus bars on the weekend before the final exam. The portion of all students at her university who visited campus bars on the weekend before the final exam week is an example of 37) _____

A) a parameter.
B) a discrete random variable.
C) a categorical random variable.
D) a continuous random variable.

Answer: A
Explanation: A)
B)
C)
D)

38) The portion of the universe that has been selected for analysis is called 38) _____

A) a statistic.
B) a frame.
C) a parameter.
D) a sample.

Answer: D
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

39) Referring to Table 1-1, the possible responses to the question "In which year were you born?" are values from a 39) _____

A) categorical random variable.
B) discrete numerical random variable.
C) continuous numerical random variable.
D) parameter.

Answer: B
Explanation: A)
B)
C)
D)

40) A study attempted to estimate the proportion of Florida residents who were willing to spend more tax dollars on protecting the beaches from environmental disasters. Twenty-five hundred Florida residents were surveyed. What type of data collection procedure was most likely used to collect the data for this study? 40) _____

A) a random sample
B) a designed experiment
C) observational data
D) a published source

Answer: A
Explanation: A)
B)
C)
D)

41) The classification of student major (accounting, economics, management, marketing, other) is an example of 41) _____

A) a parameter.
B) a continuous random variable.
C) a categorical random variable.
D) a discrete random variable.

Answer: C
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

42) Referring to Table 1-1, the possible responses to the question " Out of a 100 point score with 100 being the highest and 0 being the lowest, what is your satisfaction level on the videocassette recorder that you purchased?" result in 42) _____

A) a nominal scale variable.
B) an interval scale variable.
C) a ratio scale variable.
D) an ordinal scale variable.

Answer: B
Explanation: A)
B) The rating is interval scale not ordinal scale because the difference in rating between "80" and "90" can be treated as the same as the difference between "30" and "40."
C)
D)

43) A summary measure that is computed to describe a characteristic from only a sample of the population is called 43) _____

A) a parameter.
B) a statistic.
C) the scientific method.
D) a census.

Answer: B
Explanation: A)
B)
C)
D)

44) The classification of student class designation (freshman, sophomore, junior, senior) is an example of 44) _____

A) a categorical random variable.
B) a continuous random variable.
C) a discrete random variable.
D) a parameter.

Answer: A
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

45) Referring to Table 1-1, the possible responses to the question "Are you happy, indifferent, or unhappy with the performance per dollar spent on the videocassette recorder?" result in 45) _____

A) an interval scale variable.
B) a nominal scale variable.
C) a ratio scale variable.
D) an ordinal scale variable.

Answer: D

Explanation: A)
B)
C)
D)

46) Researchers suspect that the average number of units earned per semester by college students is rising. A researcher at Calendula College wishes to estimate the number of units earned by students during the spring semester at Calendula. To do so, he randomly selects 100 student transcripts and records the number of units each student earned in the spring term. He found that the average number of semester units completed was 12.96 units per student. Identify the population of interest to the researcher. 46) _____

A) all college students enrolled in the spring
B) all college students
C) all Calendula College students
D) all Calendula College students enrolled in the spring

Answer: D

Explanation: A)
B)
C)
D)

47) The chancellor of a major university was concerned about alcohol abuse on her campus and wanted to find out the proportion of students at her university who visited campus bars on the weekend before the final exam week. Her assistant took a random sample of 250 students. The total number of students in the sample who visited campus bars on the weekend before the final exam week is an example of 47) _____

A) a discrete random variable.
B) a parameter.
C) a continuous random variable.
D) a categorical random variable.

Answer: A

Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

48) Referring to Table 1-1, which of the following will be a good frame for drawing a sample? 48) _____
A) the list of customers who returned the registration card
B) telephone directory
C) voting registry
D) a list of potential customers purchased from a database marketing company

Answer: A
Explanation: A)
B)
C)
D)

49) Most analysts focus on the cost of tuition as the way to measure the cost of a college education. But incidentals, such as textbook costs, are rarely considered. A researcher at Drummand University wishes to estimate the textbook costs of first-year students at Drummand. To do so, she monitored the textbook cost of 250 first-year students and found that their average textbook cost was $300 per semester. Identify the population of interest to the researcher. 49) _____
A) all Drummand University students
B) all college students
C) the 250 students that were monitored
D) all first-year Drummand University students

Answer: D
Explanation: A)
B)
C)
D)

50) A study is under way in Yosemite National Forest to determine the adult height of American pine trees. Specifically, the study is attempting to determine what factors aid a tree in reaching heights greater than 60 feet tall. It is estimated that the forest contains 25,000 adult American pines. The study involves collecting heights from 250 randomly selected adult American pine trees and analyzing the results. Identify the population from which the study was sampled. 50) _____
A) all American pine trees, of any age, in the forest
B) the 250 randomly selected adult American pine trees
C) all the adult American pine trees taller than 60 feet
D) the 25,000 adult American pine trees in the forest

Answer: D
Explanation: A)
B)
C)
D)

51) The chancellor of a major university was concerned about alcohol abuse on her campus and wanted to find out the proportion of students at her university who visited campus bars on the weekend before the final exam week. Her assistant took a random sample of 250 students. The portion of students in the sample who visited campus bars on the weekend before the final exam week is an example of 51) _____

A) a parameter.
B) a statistic
C) a categorical random variable.
D) a discrete random variable.

Answer: B
Explanation: A)
B)
C)
D)

52) Which of the following is <u>not</u> an element of descriptive statistical problems? 52) _____

A) identification of patterns in the data
B) an inference made about the population based on the sample
C) tables, graphs, or numerical summary tools
D) the population or sample of interest

Answer: B
Explanation: A)
B)
C)
D)

53) A statistics student found a reference in the campus library that contained the median family incomes for all 50 states. She would report her data as being collected using 53) _____

A) a designed experiment.
B) a random sample.
C) observational data.
D) a published source.

Answer: D
Explanation: A)
B)
C)
D)

TABLE 1-1

The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

54) Referring to Table 1-1, the possible responses to the question "What brand of videocassette recorder did you purchase?" are values from a 54) _____

A) parameter.
B) discrete numerical random variable.
C) categorical random variable.
D) continuous numerical random variable.

Answer: C
Explanation: A)
B)
C)
D)

55) Those methods involving the collection, presentation, and characterization of a set of data in order to properly describe the various features of that set of data are called 55) _____

A) descriptive statistics. B) sampling.
C) statistical inference. D) the scientific method.

Answer: A
Explanation: A)
B)
C)
D)

56) Which of the following is a continuous quantitative variable? 56) _____

A) the color of a student's eyes
B) the number of gallons of milk sold at the local grocery store yesterday
C) the number of employees of an insurance company
D) the amount of milk produced by a cow in one 24-hour period

Answer: D
Explanation: A)
B)
C)
D)

57) Most analysts focus on the cost of tuition as the way to measure the cost of a college education. But incidentals, such as textbook costs, are rarely considered. A researcher at Drummand University wishes to estimate the textbook costs of first-year students at Drummand. To do so, she monitored the textbook cost of 250 first-year students and found that their average textbook cost was $300 per semester. Identify the sample in the study. 57) _____

A) all first-year Drummand University students
B) all college students
C) all Drummand University students
D) the 250 students that were monitored

Answer: D
Explanation: A)
B)
C)
D)

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

58) In purchasing an automobile, there are a number of variables to consider. The color of the car is an example of a(n) _____ variable. 58) _____

Answer: categorical
Explanation:

59) The Commissioner of Health in New York State wanted to study malpractice litigation in New York. A sample of 31 thousand medical records was drawn from a population of 2.7 million patients who were discharged during the year 1997. The proportion of malpractice claims filed from the sample of 31 thousand patients is a(n) _____. 59) _____

Answer: statistic
Explanation:

60) A personal computer user survey was conducted. Primary word processing package used is an example of a(n) _____ variable. 60) _____

Answer: categorical
Explanation:

61) Mediterranean fruit flies were discovered in California a few years ago and badly damaged the oranges grown in that state. Suppose the manager of a large farm wanted to study the impact of the fruit flies on the orange crops on a daily basis over a 6-week period. On each day a random sample of orange trees were selected from within a random sample of acres. The daily average number of damaged oranges per tree and the proportion of trees having damaged oranges were calculated. In this study, the presentation and characterization of the two main measures calculated each day (i.e., average number of damaged oranges per tree and proportion of trees having damaged oranges) is called _____ . 61) _____

Answer: descriptive statistics/methods
Explanation:

62) An insurance company evaluates many numerical variables about a person before deciding on an appropriate rate for automobile insurance. How long a person has been a licensed driver is an example of a(n) _____ numerical variable. 62) _____

Answer: continuous
Explanation:

63) The Dean of Students conducted a survey on campus. Grade point average (GPA) is an example of a(n) _____ numerical variable. 63) _____

Answer: continuous
Explanation:

64) The Dean of Students conducted a survey on campus. Number of clubs, groups, teams, and organizations affiliated with on campus is an example of a(n) _____ numerical variable. 64) _____

Answer: discrete
Explanation:

65) The Commissioner of Health in New York State wanted to study malpractice litigation in New York. A sample of 31 thousand medical records was drawn from a population of 2.7 million patients who were discharged during the year 1997. Using the information obtained from the sample to predict population characteristics with respect to malpractice litigation is an example of _____. 65) _____

Answer: inferential statistics
Explanation:

66) The Quality Assurance Department of a large urban hospital is attempting to monitor and evaluate patient satisfaction with hospital services. Prior to discharge, a random sample of patients is asked to fill out a questionnaire to rate such services as medical care, nursing, therapy, laboratory, food, and cleaning. The Quality Assurance Department prepares weekly reports that are presented at the Board of Directors meetings and extraordinary/atypical ratings are easy to flag. True population characteristics estimated from the sample results each week are called _____. 66) _____

Answer: parameters
Explanation:

67) The Dean of Students conducted a survey on campus. Class designation (Freshman, Sophomore, Junior, Senior) is an example of a(n) _____ variable. 67) _____

Answer: categorical
Explanation:

68) The Dean of Students conducted a survey on campus. Number of credits currently enrolled for is an example of a(n) _____ numerical variable. 68) _____

Answer: discrete
Explanation:

69) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (N = 40,000) workers in order to study their preferences for the various components of a potential package. In this study, methods that result in decisions concerning population characteristics based only on the sample results are called _____. 69) _____

Answer: inferential statistics/methods
Explanation:

70) Most colleges admit students based on their achievements in a number of different areas. Whether a student has taken any advanced placement courses is an example of a(n) _____ variable. 70) _____

Answer: categorical
Explanation:

71) The Commissioner of Health in New York State wanted to study malpractice litigation in New York. A sample of 31 thousand medical records was drawn from a population of 2.7 million patients who were discharged during the year 1997. The collection, presentation, and characterization of the data from patient medical records are examples of _____. 71) _____

Answer: descriptive statistics/methods
Explanation:

72) The Dean of Students conducted a survey on campus. Major area of study is an example of a(n) _____ variable. 72) _____

Answer: categorical
Explanation:

73) An insurance company evaluates many numerical variables about a person before deciding on an appropriate rate for automobile insurance. The distance a person drives in a year is an example of a(n) _____ variable. 73) _____

Answer: continuous
Explanation:

74) In purchasing an automobile, there are a number of variables to consider. The classification of the car as a subcompact, compact, standard, or luxury size is an example of a(n) _____ variable. 74) _____

Answer: categorical
Explanation:

75) An insurance company evaluates many numerical variables about a person before deciding on an appropriate rate for automobile insurance. A person's age is an example of a(n) _____ numerical variable. 75) _____

Answer: continuous
Explanation:

76) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (*N* = 40,000) workers in order to study their preferences for the various components of a potential package. In this study, methods involving the collection, presentation, and characterization of the data are called _____. 76) _____

Answer: descriptive statistics/methods
Explanation:

77) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (*N* = 40,000) workers in order to study their preferences for the various components of a potential package. The Director will use the data from the sample to compute _____. 77) _____

Answer: statistics
Explanation:

78) Most colleges admit students based on their achievements in a number of different areas. The grade obtained in senior level English. (A, B, C, D, or F) is an example of a(n) _____ variable. 78) _____

Answer: categorical
Explanation:

79) A personal computer user survey was conducted. The number of computer magazine subscriptions is an example of a(n) _____ numerical variable. 79) _____

Answer: discrete
Explanation:

80) An insurance company evaluates many numerical variables about a person before deciding on an appropriate rate for automobile insurance. The number of claims a person has made in the last 3 years is an example of a(n) _____ numerical variable. 80) _____

Answer: discrete
Explanation:

81) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (*N* = 40,000) workers in order to study their preferences for the various components of a potential package. The 500 employees who will participate in this study constitute the _____. 81) _____

Answer: sample
Explanation:

82) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (N = 40,000) workers in order to study their preferences for the various components of a potential package. Information obtained from the sample will be used to draw conclusions about the true population _____. 82) _____

Answer: parameters
Explanation:

83) A personal computer user survey was conducted. Hours of personal computer use per week is an example of a(n) _____ numerical variable 83) _____

Answer: continuous
Explanation:

84) Mediterranean fruit flies were discovered in California a few years ago and badly damaged the oranges grown in that state. Suppose the manager of a large farm wanted to study the impact of the fruit flies on the orange crops on a daily basis over a 6-week period. On each day a random sample of orange trees were selected from within a random sample of acres. The daily average number of damaged oranges per tree and the proportion of trees having damaged oranges were calculated. The two main measures calculated each day (i.e., average number of damaged oranges per tree and proportion of trees having damaged oranges) are called _____. 84) _____

Answer: statistics
Explanation:

85) A personal computer user survey was conducted. The number of years using a personal computer is an example of a(n) _____ numerical variable. 85) _____

Answer: continuous
Explanation:

86) Mediterranean fruit flies were discovered in California a few years ago and badly damaged the oranges grown in that state. Suppose the manager of a large farm wanted to study the impact of the fruit flies on the orange crops on a daily basis over a 6-week period. On each day a random sample of orange trees were selected from within a random sample of acres. The daily average number of damaged oranges per tree and the proportion of trees having damaged oranges were calculated. In this study, drawing conclusions on any one day about the true population characteristics based on information obtained from the sample is called _____. 86) _____

Answer: inferential statistics/methods
Explanation:

87) An insurance company evaluates many numerical variables about a person before deciding on an appropriate rate for automobile insurance. The number of tickets a person has received in the last 3 years is an example of a(n) _____ numerical variable. 87) _____

Answer: discrete
Explanation:

88) A personal computer user survey was conducted. Number of personal computers owned is an example of a(n) _____ numerical variable. 88) _____

Answer: discrete
Explanation:

89) The Dean of Students conducted a survey on campus. The gender of the student is an example of a(n) _____ variable. 89) _____

Answer: categorical
Explanation:

90) The Commissioner of Health in New York State wanted to study malpractice litigation in New York. A sample of 31 thousand medical records was drawn from a population of 2.7 million patients who were discharged during the year 1997. The true proportion of malpractice claims filed from the population of 2.7 million patients is a(n) _____. 90) _____

Answer: parameter
Explanation:

91) The Quality Assurance Department of a large urban hospital is attempting to monitor and evaluate patient satisfaction with hospital services. Prior to discharge, a random sample of patients is asked to fill out a questionnaire to rate such services as medical care, nursing, therapy, laboratory, food, and cleaning. The Quality Assurance Department prepares weekly reports that are presented at the Board of Directors meetings and extraordinary/atypical ratings are easy to flag. Values computed from the sample results each week are called _____. 91) _____

Answer: statistics
Explanation:

92) In purchasing an automobile, there are a number of variables to consider. The body style of the car (sedan, coupe, wagon, etc.) is an example of a(n) _____ variable. 92) _____

Answer: categorical
Explanation:

93) The Dean of Students conducted a survey on campus. Average SAT score in mathematics is an example of a(n) _____ numerical variable. 93) _____

Answer: continuous
Explanation:

94) Most colleges admit students based on their achievements in a number of different areas. The total SAT score achieved by a student is an example of a(n) _____ numerical variable. 94) _____

Answer: discrete
Explanation:

95) A personal computer user survey was conducted. Computer brand primarily used is an example of a(n) _____ variable. 95) _____

Answer: categorical
Explanation:

96) The Human Resources Director of a large corporation wishes to develop an employee benefits package and decides to select 500 employees from a list of all (N = 40,000) workers in order to study their preferences for the various components of a potential package. All the employees in the corporation constitute the _____. 96) _____

Answer: population
Explanation:

97) Mediterranean fruit flies were discovered in California a few years ago and badly damaged the oranges grown in that state. Suppose the manager of a large farm wanted to study the impact of the fruit flies on the orange crops on a daily basis over a 6-week period. On each day a random sample of orange trees were selected from within a random sample of acres. The daily average number of damaged oranges per tree and the proportion of trees having damaged oranges were calculated. The two main measures calculated each day (i.e., average number of damaged oranges per tree and proportion of trees having damaged oranges) may be used on a daily basis to estimate the respective true population _____. 97) _____

Answer: parameters
Explanation:

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

98) A statistic is usually used to provide an estimate for a usually unobserved parameter. 98) _____

Answer: True False
Explanation:

99) The quality ("terrible," "poor," "fair," "acceptable," "very good," and "excellent") of a day care center is an example of a numerical variable. 99) _____

Answer: True False
Explanation:

100) A statistic is usually unobservable while a parameter is usually observable. 100) _____

Answer: True False
Explanation:

101) The answer to the question "What is your sleeping bag temperature rating?" is an example of a ratio scaled variable. 101) _____

Answer: True False
Explanation:

102) The amount of alcohol consumed by a person per week will be measured on an interval scale. 102) _____

Answer: True False
Explanation:

103) The number of defective apples in a single box is an example of a continuous variable. 103) _____

Answer: True False
Explanation:

104) The type of TV one owns is an example of a numerical variable. 104) _____

Answer: True False
Explanation:

105) The amount of alcohol consumed by a person per week is an example of a continuous variable. 105) _____

Answer: True False
Explanation:

106) Whether the university is private or public is an example of a nominal scaled variable. 106) _____

Answer: True False
Explanation:

107) A population is the totality of items or things under consideration. 107) _____

Answer: True False
Explanation:

108) Problems may arise when statistically unsophisticated users who do not understand the assumptions behind the statistical procedures or their limitations are misled by results obtained from computer software. 108) _____

Answer: True False
Explanation:

109) The amount of calories contained in a pack of 12-ounce cheese will be measured on a ratio scale. 109) _____

Answer: True False
Explanation:

110) Faculty rank (professor to lecturer) is an example of discrete numerical data. 110) _____

Answer: True False
Explanation:

111) A continuous variable may take on any value within its relevant range even though the measurement device may not be precise enough to record it. 111) _____

Answer: True False
Explanation:

112) The amount of coffee consumed by an individual in a day is an example of a discrete numerical variable. 112) _____

Answer: True False
Explanation:

113) The date when a production line in a factory is out-of-control will be measured with a ratio scale. 113) _____

Answer: True False
Explanation:

114) The answer to the question "What is your favorite color?" is an example of an ordinal scaled variable. 114) _____

Answer: True False
Explanation:

115) Marital status is an example of a numerical variable. 115) _____

Answer: True False
Explanation:

116) The level of satisfaction ("Very unsatisfied," "Fairly unsatisfied," "Fairly satisfied," and "Very satisfied") in a class is an example of an ordinal scaled variable. 116) _____

Answer: True False
Explanation:

117) Whether the university is private or public is an example of a categorical variable. 117) _____

Answer: True False
Explanation:

118) The possible responses to the question "How many times in the past three months have you visited a city park?" are values from a discrete variable. 118) _____

Answer: True False
Explanation:

119) The possible responses to the question "How long have you been living at your current residence?" are values from a continuous variable. 119) _____

Answer: True False
Explanation:

120) The answer to the question "How many hours on average do you spend watching TV every week?" is an example of a ratio scaled variable. 120) _____

Answer: True False
Explanation:

121) The answer to the question "How do you rate the quality of your business statistics course" is an example of an ordinal scaled variable. 121) _____

Answer: True False
Explanation:

122) The amount of time a student spent studying for an exam will be measured on a ratio scale. 122) _____

Answer: True False
Explanation:

123) The amount of calories contained in a pack of 12-ounce cheese is an example of a discrete variable. 123) _____

Answer: True False
Explanation:

124) The grade level (K-12) of a student is an example of a numerical variable. 124) _____

Answer: True False
Explanation:

125) A professor computed the sample average exam score of 20 students and used it to estimate the average exam score of the 1,500 students taking the exam was an example of inferential statistics. 125) _____

Answer: True False
Explanation:

126) The level of satisfaction ("Very unsatisfied," "Fairly unsatisfied," "Fairly satisfied," and "Very satisfied") in a class is an example of a categorical variable. 126) _____

Answer: True False
Explanation:

127) Using the number of registered voters who turned out to vote for the primary in Iowa to predict the number of registered voters who will turn out to vote in Vermont's primary is an example of descriptive statistics. 127) _____

Answer: True ✓ False
Explanation:

128) The quality ("terrible," "poor," "fair," "acceptable," "very good," and "excellent") of a day care center is an example of a nominal scaled variable. 128) _____

Answer: True ✓ False
Explanation:

129) Managers need an understanding of statistics to be able to present and describe information accurately, draw conclusions about large populations based on small samples, improve processes, and make reliable forecasts. 129) _____

Answer: ✓ True False
Explanation:

130) Marital status is an example of an ordinal scaled variable. 130) _____

Answer: True ✓ False
Explanation:

131) A sample is the portion of the universe that is selected for analysis. 131) _____

Answer: ✓ True False
Explanation:

132) The type of TV one owns is an example of an ordinal scaled variable. 132) _____

Answer: True ✓ False
Explanation:

133) Compiling the number of registered voters who turned out to vote for the primary in Iowa is an example of descriptive statistics. 133) _____

Answer: ✓ True False
Explanation:

134) The grade level (K-12) of a student is an example of a nominal scaled variable. 134) _____

Answer: True ✓ False
Explanation:

135) Student grades (A to F) are an example of continuous numerical data. 135) _____

Answer: True ✓ False
Explanation:

136) The amount of time a student spent studying for an exam is an example of a continuous variable. 136) _____

Answer: ✓ True False
Explanation:

137) The number of defective apples in a single box will be measured on an interval scale. 137) _____

Answer: True ✓ False
Explanation:

Answer Key
Testname: C1

1) A
2) B
3) A
4) C
5) C
6) B
7) A
8) C
9) A
10) D
11) C
12) D
13) D
14) D
15) C
16) B
17) C
18) D
19) A
20) C
21) D
22) B
23) B
24) B
25) C
26) D
27) D
28) C
29) D
30) D
31) D
32) B
33) C
34) C
35) A
36) D
37) A
38) D
39) B
40) A
41) C
42) B
43) B
44) A
45) D
46) D
47) A
48) A
49) D
50) D

51) B
52) B
53) D
54) C
55) A
56) D
57) D
58) categorical
59) statistic
60) categorical
61) descriptive statistics/methods
62) continuous
63) continuous
64) discrete
65) inferential statistics
66) parameters
67) categorical
68) discrete
69) inferential statistics/methods
70) categorical
71) descriptive statistics/methods
72) categorical
73) continuous
74) categorical
75) continuous
76) descriptive statistics/methods
77) statistics
78) categorical
79) discrete
80) discrete
81) sample
82) parameters
83) continuous
84) statistics
85) continuous
86) inferential statistics/methods
87) discrete
88) discrete
89) categorical
90) parameter
91) statistics
92) categorical
93) continuous
94) discrete
95) categorical
96) population
97) parameters
98) TRUE
99) FALSE
100) FALSE

Answer Key
Testname: C1

101) FALSE
102) FALSE
103) FALSE
104) FALSE
105) TRUE
106) TRUE
107) TRUE
108) TRUE
109) TRUE
110) FALSE
111) TRUE
112) FALSE
113) FALSE
114) FALSE
115) FALSE
116) TRUE
117) TRUE
118) TRUE
119) TRUE
120) TRUE
121) TRUE
122) TRUE
123) FALSE
124) FALSE
125) TRUE
126) TRUE
127) FALSE
128) FALSE
129) TRUE
130) FALSE
131) TRUE
132) FALSE
133) TRUE
134) FALSE
135) FALSE
136) TRUE
137) FALSE