Chapter 01
What Is Statistics?

Multiple Choice Questions

1. The general process of gathering, organizing, summarizing, analyzing, and interpreting data is called
A. Statistics.
B. Descriptive statistics.
C. Inferential statistics.
D. Levels of measurement.

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Topic: 01-03 What is Meant By Statistics?

2. The general process of analyzing, and interpreting data to assist in making more effective decisions is called
A. Statistics.
B. Descriptive statistics.
C. Inferential statistics.
D. Levels of measurement.

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-04 Types of Statistics
Topic: 01-06 Inferential Statistics

3. The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called
A. Statistics.
B. Descriptive statistics.
C. Inferential statistics.
D. Levels of measurement.

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Topic: 01-03 What is Meant By Statistics?

4. The general process of organizing, summarizing, and presenting data in an informative way is called
A. Statistics.
B. Descriptive statistics.
C. Inferential statistics.
D. Levels of measurement.

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-05 Descriptive Statistics

5. (i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called
(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called
(iii) The entire set of individuals or objects of interest or the measurements obtained from all individuals or objects of interest is called
A. (i) statistics, (ii) descriptive statistics, and (iii) a population.
B. (i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.
C. (i) inferential statistics, (ii) descriptive statistics, and (iii) a population.
D. (i) statistics, (ii) descriptive statistics, and (iii) a sample.
E. (i) statistics, (ii) inferential statistics, and (iii) a population.

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-06 Inferential Statistics

6. (i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called
(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called
(iii) The subset of individuals or objects of interest or the measurements obtained from all individuals or objects of interest is called
A. (i) statistics, (ii) descriptive statistics, and (iii) a population.
B. (i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.
C. (i) inferential statistics, (ii) descriptive statistics, and (iii) a population.
D. (i) statistics, (ii) inferential statistics, and (iii) a sample.
E. (i) statistics, (ii) inferential statistics, and (iii) a population.

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-06 Inferential Statistics

7. (i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called
(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called
(iii) If we test a small number of light bulbs from a large group, the small group is called a
A. (i) statistics, (ii) descriptive statistics, and (iii) a population.
B. (i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.
C. (i) inferential statistics, (ii) descriptive statistics, and (iii) a population.
D. (i) statistics, (ii) inferential statistics, and (iii) a sample.
E. (i) statistics, (ii) inferential statistics, and (iii) a population.

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-06 Inferential Statistics

8. (i) There are two types of variables-quantitative and qualitative.
(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.
(iii) Qualitative variables can be further divided into discrete and continuous variables.
A. (i), (ii) and (iii) are all correct statements.
B. (i) and, (ii) are correct statements but not (iii).
C. (i) and, (iii) are correct statements but not (ii).
D. (ii) and, (iii) are correct statements but not (i).

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-07 Types of Variables

9. The main purpose of descriptive statistics is to:
A. Summarize data in a useful and informative manner.
B. Make inferences about a population.
C. Determine if the data adequately represents the population.
D. Gather or collect data.

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-05 Descriptive Statistics

10. When TV advertisements report that "2 out of 3 dentists surveyed indicated they would recommend Brand X toothpaste to their patients," an informed consumer may question the conclusion because:
A. The results were incorrectly computed.
B. Dentists were not really surveyed.
C. The conclusion does not include the total number of dentists surveyed.
D. The conclusion is not illustrated with a graph.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

11. What is a portion or part of a population called?
A. Random sample
B. Sample
C. Tally
D. Frequency distribution

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

12. A marketing class of 50 students evaluated the instructor using the following scale: superior, good, average, poor, and inferior. The descriptive summary showed the following survey results: 2% superior, 8% good, 45% average, 45% poor, and 0% inferior.
A. The instructor's performance was great!!!
B. The instructor's performance was inferior.
C. Most students rated the instructor as poor or average.
D. No conclusions can be made.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-05 Descriptive Statistics

13. Which word is NOT part of the definition of descriptive statistics?
A. Organizing
B. Analyzing
C. Presenting
D. Predicting

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-05 Descriptive Statistics

14. A marketing class of 50 students evaluated the instructor using the following scale: superior, good, average, poor, and inferior. The descriptive summary showed the following survey results: 42% superior, 28% good, 25% average, 5% poor, and 0% inferior.
A. The instructor's performance was great!!!
B. The instructor's performance was inferior.
C. Most students rated the instructor as poor or average.
D. No conclusions can be made.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-05 Descriptive Statistics

15. Colleen Waite, Director of General Canadian Sales, is concerned by a downward sales trend. Specifically, their customer base is stable at 2,200, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by selecting a focus group of 50 customers.
A. The focus group of 50 customers represents a sample.
B. The focus group of 50 customers represents a population.
C. The focus group of 50 customers represents an inferential statistic.
D. The focus group of 50 customers represents a census.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

16. Colleen Waite, Director of General Canadian Sales, is concerned by a downward sales trend. Specifically, their customer base is stable at 2,200, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by selecting a focus group of 50 customers.
A. The 2,200 customers represent a sample.
B. The 2,200 customers represent a population.
C. The 2,200 customers represent an inferential statistic.
D. The 2,200 customers represent a census.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

17. What type of data is the number of litres of gasoline pumped by a filling station during a day?
A. Qualitative
B. Continuous
C. Attribute
D. Discrete

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

18. What type of data is the projected return on an investment?
A. Qualitative
B. Continuous
C. Attribute
D. Discrete

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

19. (i) There are two types of variables-quantitative and qualitative.
(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.
(iii) Quantitative variables can be further divided into discrete and continuous variables.
A. (i), (ii) and (iii) are all correct statements.
B. (i) and, (ii) are correct statements but not (iii).
C. (i) and, (iii) are correct statements but not (ii).
D. (ii) and, (iii) are correct statements but not (i).
E. Only statement (ii) is true.

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

20. What type of data is the number of robberies reported in your city?
A. Attribute
B. Continuous
C. Discrete
D. Qualitative

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

21. A survey reports consumers' preferred brands of dish soap. What type of data is this called?
A. Quantitative
B. Continuous
C. Discrete
D. Qualitative

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

22. Which of the following is an example of attribute data?
A. Number of children in a family
B. Weight of a person
C. Colour of ink in a pen
D. Miles between oil changes

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

23. A survey reports consumers' preferred hair colour. What type of data is this called?
A. Attribute or Qualitative
B. Continuous
C. Discrete
D. Quantitative

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

24. (i) There are two types of variables-quantitative and qualitative.
(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.
(iii) Quantitative variables can be further divided into discrete and continuous variables.
A. (i), (ii) and (iii) are all correct statements.
B. (i) and, (ii) are correct statements but not (iii).
C. (i) and, (iii) are correct statements but not (ii).
D. (ii) and, (iii) are correct statements but not (i).

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

25. Your height and weight are examples of which type of random variable?
A. Discrete
B. Continuous
C. Mutually exclusive
D. Qualitative

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

26. What type of data is the amount of income tax that you have paid?
A. Mutually exhaustive
B. Continuous
C. Discrete
D. Qualitative

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

27. A market researcher is interested in determining the average income for families in York Region, Ontario. To accomplish this, he takes a random sample of 200 families from the region and uses the data gathered to estimate the average income for families of the entire region. This process is an example of _____.
A. descriptive statistics
B. inferential statistics
C. mutually exclusive statistics
D. qualitative
E. parametric methods

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

28. Which one of the following statistics is NOT an example of discrete data?
A. Number of households watching Canadian Idol.
B. Number of employees reporting in sick.
C. Distance traveled between Toronto and Ottawa.
D. Number of members of the York Region Lions Club.
E. Number of family members.

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

29. Which of the following is an example of continuous data?
A. Family income
B. Number of students in a statistics class
C. Postal codes of shoppers
D. Rankings of baseball teams in a league

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

30. The incomes of a group of 50 loan applicants are obtained. Which level of measurement is income?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

31. A bank asks customers to evaluate the drive-thru service as to good, average, or poor. Which level of measurement is this classification?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

32. If Gallup, Harris and other pollsters asked people to indicate their political party affiliation-Liberal, Conservative or NDP, the data gathered would be an example of which scale of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

33. The members of each basketball team wear numbers on the back of their jerseys. What scale of measurement are these numbers considered?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

34. A questionnaire contained a question regarding marital status. The respondent checked single, married, divorced, separated or widowed. What is the scale of measurement for this question?
A. Ratio
B. Interval
C. Ordinal
D. Nominal

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

35. Respondents were asked, "Do you now earn more than or less than you did five years ago?" What is this level of measurement?
A. Interval
B. Ratio
C. Nominal
D. Ordinal

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

36. If unemployment is 5.5% of the population, what is this level of measurement?
A. Nominal
B. Ordinal
C. Interval or ratio
D. Descriptive

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-11 Interval Level Data
Topic: 01-12 Ratio Level Data

37. The Equal Employment Opportunity Act requires employers to classify their employees by gender and national origin. Which level of measurement is this?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

38. What level of measurement are the Centigrade and Fahrenheit temperature scales?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-11 Interval Level Data

39. What level of measurement is the number of auto accidents reported in a given month?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

40. The names of the positions on a hockey team, such as forward and defence, are examples of what level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

41. What level of measurement is the price of an admission ticket to a movie theater?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

42. The final rankings of the top 20 NCAA college basketball teams are an example of which level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

43. Your height and weight are examples of which level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

44. Shoe sizes, such as 7B, 10D and 12EEE, are examples of what level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

45. The Nielsen Ratings break down the number of people watching a particular television show by age. Age is what level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

46. What level of measurement is a bar code?
A. Ratio
B. Ordinal
C. Interval
D. Nominal

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

47. A group of women tried five brands of hair spray and ranked them according to preference. What level of measurement is this?
A. Nominal
B. Ordinal
C. Interval
D. Ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

48. Which of the following three statements are true?

(i) Statistics is defined as a body of techniques used to facilitate the collection, organization, presentation, analysis and interpretation of information for the purpose of making better decisions.
(ii) The order that runners finish in a race would be an example of continuous data.
(iii) The principal difference between the interval and ratio scale is that the ratio scale has a meaningful zero point.
A. (i), (ii) and (iii) are all correct statements.
B. (i) and, (ii) are correct statements but not (iii).
C. (i) and, (iii) are correct statements but not (ii).
D. (ii) and, (iii) are correct statements but not (i).

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-07 Types of Variables
Topic: 01-11 Interval Level Data
Topic: 01-12 Ratio Level Data

49. (i) If we select 100 persons out of 25,000 registered voters and question them about candidates and issues, the 100 persons are referred to as the population.
(ii) The order that runners finish in a race would be an example of continuous data.
(iii) Qualitative data are usually summarized in graphs and bar charts.
A. (i), (ii) and (iii) are all correct statements.
B. (i) and, (ii) are correct statements but not (iii).
C. (i) and, (iii) are correct statements but not (ii).
D. (iii) only is correct.

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-03 What is Meant By Statistics?
Topic: 01-07 Types of Variables
Topic: 01-11 Interval Level Data
Topic: 01-12 Ratio Level Data

50. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Label the variable gender as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.
A. qualitative, discrete, nominal
B. qualitative, continuous, Ordinal
C. quantitative, discrete, nominal
D. quantitative, continuous, ratio

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-07 Types of Variables
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

51. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Label the variable marital status as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.
A. qualitative, discrete, nominal
B. qualitative, continuous, Ordinal
C. quantitative, discrete, nominal
D. quantitative, continuous, ratio

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-07 Types of Variables
Topic: 01-08 Levels of Measurement
Topic: 01-09 Nominal Level Data

52. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Label the variable credit rating as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.
A. qualitative, continuous, nominal
B. qualitative, discrete, ordinal
C. quantitative, discrete, nominal
D. quantitative, continuous, ratio

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-07 Types of Variables
Topic: 01-08 Levels of Measurement
Topic: 01-10 Ordinal Level Data

53. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Label the variable annual income as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.
A. qualitative, discrete, nominal
B. qualitative, continuous, Ordinal
C. quantitative, discrete, nominal
D. quantitative, continuous, ratio

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-07 Types of Variables
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

54. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Label the variable age as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.
A. qualitative, discrete, nominal
B. qualitative, continuous, Ordinal
C. quantitative, discrete, nominal
D. quantitative, continuous, ratio

Accessibility: Keyboard Navigation
Difficulty: Hard
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-07 Types of Variables
Topic: 01-08 Levels of Measurement
Topic: 01-12 Ratio Level Data

55. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Which two variables are considered to be continuous rather than discrete?
A. gender and marital status
B. age and credit rating
C. gender and annual income
D. annual income and age

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

56. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Which two of the variables are considered to be quantitative rather than qualitative?
A. gender and marital status
B. age and credit rating
C. gender and annual income
D. annual income and age

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

57. A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age. Which three variables are considered to be qualitative rather than quantitative?
A. gender, age, and marital status
B. annual income, age, and credit rating
C. credit rating, gender, and marital status
D. gender, annual income, and age

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

58. The collecting, organizing, presenting, analyzing, and interpreting of data is called _____.
A. discrete information
B. sample information
C. descriptive information
D. statistics

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-01 Explain why knowledge of statistics is important.
Topic: 01-03 What is Meant By Statistics?

59. The branch of statistics which does not involve generalizations is called
_____.
A. discrete statistics
B. sample statistics
C. descriptive statistics
D. inferential statistics

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-05 Descriptive Statistics

60. When we make an estimate or prediction, we use _____ techniques.
A. discrete
B. sample
C. descriptive
D. inferential

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

61. The branch of statistics from which we draw conclusions from sample data is called
_____ statistics.
A. discrete
B. sample
C. descriptive
D. inferential

Accessibility: Keyboard Navigation
Difficulty: Easy
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

62. If we test a small number of light bulbs from a large group, the small group is called a
_____.
A. discrete
B. sample
C. descriptive
D. population

63. The branch of statistics in which data is collected, analyzed and presented in a concise
format is called _____ statistics.
A. discrete
B. sample
C. descriptive
D. inferential

64. Among the many classes held at your college or university, your statistics class has been
selected for a study. This one class is referred to as a _____.
A. discrete
B. sample
C. census
D. population

65. The collection of all possible objects of interest is referred to as the _____.
A. discrete
B. sample
C. census
D. population

66. The total group being studied is called the _____.
A. discrete
B. sample
C. census
D. population

67. The number of workers reporting sick in any particular week is considered to be _____ data.
A. discrete
B. continuous
C. census
D. population

68. A variable that can have any value within a specific range is called _____.
A. discrete
B. continuous
C. census
D. population

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

69. Ranked data is an example of a(n) _____ level of measurement.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-10 Ordinal Level Data

70. The prime rate of interest is an example of a(n) _____ level of measurement.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-12 Ratio Level Data

71. The "lowest" level of measurement is _____.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-09 Nominal Level Data

72. The "highest" level of measurement is _____.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-12 Ratio Level Data

73. Categorizing students as freshmen, sophomores, juniors and seniors is an example of the _____ level of measurement.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-10 Ordinal Level Data

74. The lowest level of measurement that has some sort of ranking is _____.
A. nominal
B. ordinal
C. interval
D. ratio

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-05 Distinguish between nominal; ordinal; interval and ratio levels of measurement.
Topic: 01-10 Ordinal Level Data

75. PlayTime Toys Inc. employs 50 people in the Assembly Department. Forty of the employees belong to a union and 10 do not. Five employees are selected at random to form a committee to meet with management regarding shift starting times. Would the 50 employees be considered a population or a sample?
A. population
B. sample

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

76. PlayTime Toys Inc. employs 50 people in the Assembly Department. Forty of the employees belong to a union and 10 do not. Five employees are selected at random to form a committee to meet with management regarding shift starting times. Would the 5 selected employees be considered a population or a sample?
A. population
B. sample

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-03 Differentiate between descriptive and inferential statistics.
Topic: 01-06 Inferential Statistics

77. The Shell station on Portage Ave in Winnipeg is studying the number of litres of fuel that are sold on each day of the week. Records are available for the past year. How can the variable 'number of litres' be best described?
A. Discrete
B. Quantitative
C. Qualitative
D. Census
E. Nominal

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

78. The Shell station on Portage Ave in Winnipeg is studying the number of litres of fuel that are sold on each day of the week. Records are available for the past year. How can the variable 'number of litres' be best described?
A. Discrete
B. Continuous
C. Qualitative
D. Census
E. Nominal

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables

79. The Shell station on Portage Ave in Winnipeg is studying the number of litres of fuel that are sold on each day of the week. Records are available for the past year. Is the variable 'number of litres' discrete or continuous?
A. discrete
B. continuous

Accessibility: Keyboard Navigation
Difficulty: Medium
Learning Objective: 01-04 Classify variables as qualitative or quantitative; and discrete and continuous.
Topic: 01-07 Types of Variables