Student: _____

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.
   E. None of the choices are correct.

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.
   E. None of the choices are correct.

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.
   E. None of the choices are correct.

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.
   E. None of the choices are correct.

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.

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.

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.

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).
E. All statements are false.

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.

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.

11. What is a portion or part of a population called?
A. Random sample
B. Sample
C. Tally
D. Frequency distribution
E. None of the choices are correct

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.

13. Which word is NOT part of the definition of descriptive statistics?
    A. Organizing
    B. Analyzing
    C. Presenting
    D. Predicting
    E. None of the choices are correct

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.

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.

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.

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
    E. None of the choices are correct

18. What type of data is the projected return on an investment?
    A. Qualitative
    B. Continuous
    C. Attribute
    D. Discrete
    E. None of the choices are correct

19. (i) There are three types of variables-continuous, 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).
E. Only statement (ii) is true.

20. What type of data is the number of robberies reported in your city?
A. Attribute
B. Continuous
C. Discrete
D. Qualitative
E. None of the choices are correct

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
E. None of the choices are correct

22. Which of the following is an example of attribute data?
A. Number of children in a family
B. Weight of a person
C. Color of ink in a pen
D. Miles between oil changes
E. None of the choices are correct

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
E. None of the choices are correct

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).
E. All statements are false.

25. Your height and weight are examples of which type of random variable?
A. Discrete
B. Continuous
C. Mutually exclusive
D. Qualitative
E. None of the choices are correct

26. What type of data is the amount of income tax that you have paid?
    A. Mutually exhaustive
    B. Continuous
    C. Discrete
    D. Qualitative
    E. None of the choices are correct

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

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

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
    E. None of the choices are correct

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
    E. None of the choices are correct

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
    E. None of the choices are correct

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
    E. None of the choices are correct

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
    E. None of the choices are correct

34. A questionnaire contained a question regarding marital status. The respondent checked either single, married, divorced, separated or widowed. What is the scale of measurement for this question?
    A. Ratio
    B. Interval
    C. Ordinal
    D. Nominal
    E. None of the choices are correct

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
    E. None of the choices are correct

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
    E. None of the choices are correct

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
    E. None of the choices are correct

38. What level of measurement are the Centigrade and Fahrenheit temperature scales?
    A. Nominal
    B. Ordinal
    C. Interval
    D. Ratio
    E. None of the choices are correct

39. What level of measurement is the number of auto accidents reported in a given month?
    A. Nominal
    B. Ordinal
    C. Interval
    D. Ratio
    E. None of the choices are correct

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
    E. None of the choices are correct

41. What level of measurement is the price of an admission ticket to a movie theater?
    A. Nominal
    B. Ordinal
    C. Interval
    D. Ratio
    E. None of the choices are correct

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
    E. None of the choices are correct

43. Your height and weight are examples of which level of measurement?
    A. Nominal
    B. Ordinal
    C. Interval
    D. Ratio
    E. None of the choices are correct

44. Shoe sizes, such as 7B, 10D and 12EEE, are examples of what level of measurement?
    A. Nominal
    B. Ordinal
    C. Interval
    D. Ratio
    E. None of the choices are correct

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
    E. None of the choices are correct

46. What level of measurement is a bar code?
    A. Ratio
    B. Ordinal
    C. Interval
    D. Nominal
    E. None of the choices are correct

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
    E. None of the choices are correct

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).
E. All statements are false.

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) Another name for inductive statistics is descriptive statistics.

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. All statements are false.

50. A student was studying the political party preferences of a university's student population. The survey instrument asked students to identify themselves as a Conservative or NDP. This question is flawed because:

A. Students generally don't know their political preferences.
B. The categories are generally mutually exclusive.
C. The categories are not exhaustive.
D. Political preference is a continuous variable.

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 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
E. None of the choices are correct

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 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
E. None of the choices are correct

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 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
    E. None of the choices are correct

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 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
    E. None of the choices are correct

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. 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
    E. None of the choices are correct

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 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
    E. None of the choices are correct

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 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
    E. None of the choices are correct

58. 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, credit rating and marital status
    B. annual income, age and credit rating
    C. credit rating, gender and marital status
    D. annual income and age
    E. None of the choices are correct

59. The collecting, organizing, presenting, analyzing, and interpreting of data is called _____.
_____

60. The branch of statistics which does not involve generalizations is called _____.
_____

61. When we make an estimate or prediction, we use _____ techniques.
_____

62. The branch of statistics from which we draw conclusions from sample data is called _____ statistics.
_____

63. If we test a small number of light bulbs from a large group, the small group is called a _____.
_____

64. The branch of statistics in which data is collected, analyzed and presented in a concise format is called _____ statistics.
_____

65. 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 _____.
_____

66. Another name for inferential statistics is _____ statistics.
_____

67. The collection of all possible objects of interest is referred to as the _____.
_____

68. The total group being studied is called the _____.
_____

69. Qualitative variables are also referred to as a(n) _____.
_____

70. The number of workers reporting sick in any particular week is considered to be _____ data.
_____

71. A variable that can have any value within a specific range is called _____.
_____

72. Ranked data is an example of a(n) _____ level of measurement.
_____

73. The prime rate of interest is an example of a(n) _____ level of measurement.
_____

74. The "lowest" level of measurement is _____.
_____

75. The "highest" level of measurement is _____.
_____

76. The major advantage of ordinal data over nominal data is that it allows for _____.
_____

77. The principal difference between the interval and ratio scale of measurement is that the ratio scale has a _____.
_____

78. Nominal data requires that the categories be _____ and _____.
_____

79. Categorizing students as freshmen, sophomores, juniors and seniors is an example of the _____ level of measurement.
_____

80. The lowest level of measurement that has some sort of ranking is _____.
_____

81. Data that can be categorized into only one category is said to be _____.
_____

82. If an individual, object or measurement appears in at least one category, this listing of categories is said to be _____.
_____

01 Key

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.
E. None of the choices are correct.

Difficulty: Easy
Learning Objective: 1
Lind - Chapter 01 #1

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.
E. None of the choices are correct.

Difficulty: Easy
Learning Objective: 1
Lind - Chapter 01 #2

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.
E. None of the choices are correct.

Difficulty: Easy
Learning Objective: 1
Lind - Chapter 01 #3

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.
E. None of the choices are correct.

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #4

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.

Difficulty: Hard
Learning Objective: 2
Lind - Chapter 01 #5

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.

Difficulty: Hard
Learning Objective: 2
Lind - Chapter 01 #6

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.

Difficulty: Hard
Learning Objective: 2
Lind - Chapter 01 #7

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).
E. All statements are false.

Difficulty: Hard
Learning Objective: 3
Lind - Chapter 01 #8

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.

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #9

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.

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #10

11. What is a portion or part of a population called?
A. Random sample
B. Sample
C. Tally
D. Frequency distribution
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #11

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.

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #12

13. Which word is NOT part of the definition of descriptive statistics?
A. Organizing
B. Analyzing
C. Presenting
D. Predicting
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #13

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.

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #14

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.

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #15

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.

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #16

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #17

18. What type of data is the projected return on an investment?
A. Qualitative
B. Continuous
C. Attribute
D. Discrete
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #18

19. (i) There are three types of variables-continuous, 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).
E. Only statement (ii) is true.

Difficulty: Hard
Learning Objective: 3
Lind - Chapter 01 #19

20. What type of data is the number of robberies reported in your city?
A. Attribute
B. Continuous
C. Discrete
D. Qualitative
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #20

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #21

22. Which of the following is an example of attribute data?
A. Number of children in a family
B. Weight of a person
C. Color of ink in a pen
D. Miles between oil changes
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 3
Lind - Chapter 01 #22

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #23

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).
E. All statements are false.

Difficulty: Hard
Learning Objective: 3
Lind - Chapter 01 #24

25. Your height and weight are examples of which type of random variable?
A. Discrete
B. Continuous
C. Mutually exclusive
D. Qualitative
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #25

26. What type of data is the amount of income tax that you have paid?
A. Mutually exhaustive
B. Continuous
C. Discrete
D. Qualitative
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #26

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

Difficulty: Medium
Learning Objective: 3
Lind - Chapter 01 #27

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

Difficulty: Medium
Learning Objective: 4
Lind - Chapter 01 #28

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 4
Lind - Chapter 01 #29

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #30

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #31

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #32

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #33

34. A questionnaire contained a question regarding marital status. The respondent checked either single, married, divorced, separated or widowed. What is the scale of measurement for this question?
A. Ratio
B. Interval
C. Ordinal
D. Nominal
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #34

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #35

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #36

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #37

38. What level of measurement are the Centigrade and Fahrenheit temperature scales?
A. Nominal
B. Ordinal
C. Interval
D. Ratio
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #38

39. What level of measurement is the number of auto accidents reported in a given month?
A. Nominal
B. Ordinal
C. Interval
D. Ratio
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #39

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #40

41. What level of measurement is the price of an admission ticket to a movie theater?
A. Nominal
B. Ordinal
C. Interval
D. Ratio
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #41

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
E. None of the choices are correct

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #42

43. Your height and weight are examples of which level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #43

44. Shoe sizes, such as 7B, 10D and 12EEE, are examples of what level of measurement?
A. Nominal
B. Ordinal
C. Interval
D. Ratio
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #44

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #45

46. What level of measurement is a bar code?
A. Ratio
B. Ordinal
C. Interval
D. Nominal
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #46

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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #47

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).
E. All statements are false.

Difficulty: Hard
Learning Objective: 1
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #48

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) Another name for inductive statistics is descriptive statistics.
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. All statements are false.

Difficulty: Hard
Learning Objective: 1
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #49

50. A student was studying the political party preferences of a university's student population. The survey instrument asked students to identify themselves as a Conservative or NDP. This question is flawed because:
A. Students generally don't know their political preferences.
B. The categories are generally mutually exclusive.
C. The categories are not exhaustive.
D. Political preference is a continuous variable.

Difficulty: Medium
Learning Objective: 6
Lind - Chapter 01 #50

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 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
E. None of the choices are correct

Difficulty: Hard
Learning Objective: 3
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #51

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 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
E. None of the choices are correct

Difficulty: Hard
Learning Objective: 3
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #52

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 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
E. None of the choices are correct

Difficulty: Hard
Learning Objective: 3
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #53

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 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
E. None of the choices are correct

Difficulty: Hard
Learning Objective: 3
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #54

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. 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
E. None of the choices are correct

Difficulty: Hard
Learning Objective: 3
Learning Objective: 4
Learning Objective: 5
Lind - Chapter 01 #55

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 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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Learning Objective: 4
Lind - Chapter 01 #56

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 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
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Learning Objective: 4
Lind - Chapter 01 #57

58. 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, credit rating and marital status
B. annual income, age and credit rating
C. credit rating, gender and marital status
D. annual income and age
E. None of the choices are correct

Difficulty: Medium
Learning Objective: 3
Learning Objective: 4
Lind - Chapter 01 #58

59. The collecting, organizing, presenting, analyzing, and interpreting of data is called _____.
statistics

Difficulty: Easy
Learning Objective: 1
Lind - Chapter 01 #59

60. The branch of statistics which does not involve generalizations is called _____.
descriptive statistics

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #60

61. When we make an estimate or prediction, we use _____ techniques.
inferential or inductive

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #61

62. The branch of statistics from which we draw conclusions from sample data is called _____ statistics.
inferential

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #62

63. If we test a small number of light bulbs from a large group, the small group is called a _____.
sample

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #63

64. The branch of statistics in which data is collected, analyzed and presented in a concise format is called _____ statistics.
descriptive

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #64

65. 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 _____.
sample

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #65

66. Another name for inferential statistics is _____ statistics.
inductive

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #66

67. The collection of all possible objects of interest is referred to as the _____.
population

Difficulty: Medium
Learning Objective: 2
Lind - Chapter 01 #67

68. The total group being studied is called the _____.
population

Difficulty: Easy
Learning Objective: 2
Lind - Chapter 01 #68

69. Qualitative variables are also referred to as a(n) _____.
attribute

Difficulty: Easy
Learning Objective: 3
Lind - Chapter 01 #69

70. The number of workers reporting sick in any particular week is considered to be _____ data.
discrete

Difficulty: Medium
Learning Objective: 4
Lind - Chapter 01 #70

71. A variable that can have any value within a specific range is called _____.
continuous

Difficulty: Medium
Learning Objective: 4
Lind - Chapter 01 #71

72. Ranked data is an example of a(n) _____ level of measurement.
ordinal

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #72

73. The prime rate of interest is an example of a(n) _____ level of measurement.
ratio

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #73

74. The "lowest" level of measurement is _____.
nominal

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #74

75. The "highest" level of measurement is _____.
ratio

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #75

76. The major advantage of ordinal data over nominal data is that it allows for _____.
ranking or "greater than" relationship

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #76

77. The principal difference between the interval and ratio scale of measurement is that the ratio scale has a _____.
meaningful zero point

Difficulty: Medium
Learning Objective: 5
Lind - Chapter 01 #77

78. Nominal data requires that the categories be _____ and _____.
mutually exclusive; exhaustive

Difficulty: Medium
Learning Objective: 5
Learning Objective: 6
Lind - Chapter 01 #78

79. Categorizing students as freshmen, sophomores, juniors and seniors is an example of the _____ level of measurement.
ordinal

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #79

80. The lowest level of measurement that has some sort of ranking is _____.
ordinal

Difficulty: Easy
Learning Objective: 5
Lind - Chapter 01 #80

81. Data that can be categorized into only one category is said to be _____.
mutually exclusive

Difficulty: Medium
Learning Objective: 6
Lind - Chapter 01 #81

82. If an individual, object or measurement appears in at least one category, this listing of categories is said to be _____.
exhaustive

Difficulty: Medium
Learning Objective: 6
Lind - Chapter 01 #82

01 Summary

Category	*# of Questions*
Difficulty: Easy	29
Difficulty: Hard	13
Difficulty: Medium	40
Learning Objective: 1	6
Learning Objective: 2	21
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Lind - Chapter 01	82