Chapter 1
What is Statistics?

True/False

1. To infer something about a population, we usually take a sample from the population.

2. A store asks shoppers for their zip code to identify market areas. Zip codes are an example of ratio data.

3. Data that can only be classified into categories is nominal data.

4. The Union of Electrical Workers of America with 9,128 members polled 362 members regarding a new wage package to be submitted to management. The population is the 362 members.

5. 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.

6. Another name for inductive statistics is descriptive statistics.

7. The order that runners finish in a race would be an example of continuous data.

Multiple Choice

8. 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.

9. Which of the following is an example of a continuous variable?
    A) Family income
    B) Number of students in a statistics class
    C) Zip codes of shoppers
    D) Rankings of baseball teams in a league
    E) None of the above

10. 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 above

11. A bank asks customers to evaluate the drive-thru service as good, average, or poor. Which level of measurement is this classification?
    A) Nominal
    B) Ordinal
    C) Interval
    D) Ratio
    E) None of the above

12. What is a portion or part of a population called?
    A) Random survey
    B) Sample

C) Tally
D) Frequency distribution
E) None of the above

13. If Gallup, Harris and other pollsters asked people to indicate their political party affiliation - Democrat, Republican or Independent, the data gathered would be an example of which scale of measurement?
A) Nominal
B) Ordinal
C) Interval
D) Ratio
E) None of the above

14. 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 above

15. 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.

16. 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 above

17. The reported unemployment is 5.5% of the population. What type of scale is used to measure unemployment?
A) Nominal
B) Ordinal
C) Interval or ratio
D) Descriptive
E) None of the above

18. What level of measurement are the Centigrade and Fahrenheit temperature scales?
A) Nominal
B) Ordinal
C) Interval
D) Ratio
E) None of the above

19. What type of variable is the number of gallons of gasoline pumped by a filling station during a day?

A) Qualitative
B) Continuous
C) Attribute
D) Discrete
E) None of the above

20. What type of variable is the number of robberies reported in your city?
A) Attribute
B) Continuous
C) Discrete
D) Qualitative
E) None of the above

21. 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 above

22. The names of the positions on a hockey team, such as forward and goalie, are examples of what level of measurement?
A) Nominal
B) Ordinal
C) Interval
D) Ratio
E) None of the above

23. 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 above

24. 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 above.

25. 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 above

26. Which one of the following is NOT an example of discrete data?
A) Number of households watching the Home Shopping Network.
B) Number of employees reporting in sick.
C) Number of miles between New York City and Chicago.

D) Number of members of the Denver Lions Club.
E) Number of family members.
27. What level of measurement is a bar code?
A) Ratio
B) Ordinal
C) Interval
D) Nominal
E) None of the above

Answers: 1. True   2. False   3. True   4. False   5. True   6. False   7. False
Answers: 8. A   9. A   10. D   11. B   12. B   13. A   14. A   15. C   16. D   17. C   18. C   19. B
            20. C   21. D   22. A   23. B   24. A   25. C   26. C   27. D