



3. The Coca Cola Company has 366,000 stockholders, and a poll is conducted by randomly selecting 30 stockholders from each of the 50 states. The number of shares held by each sampled stockholder is recorded.
  - a) Are the values obtained discrete or continuous?
  - b) Which type of sampling (random, systematic, convenience, stratified, cluster) is being used?
  - c) If the average (mean) number of shares is calculated from the sample group, is the result a statistic or a parameter?
4. Identify the following as discrete or continuous variables.
  - a) The number of doctors who wash their hands between patient visits
  - b) The amount of liquid consumed by the average American each day
  - c) The weight of newborn babies at a local hospital
  - d) The time it takes a person to react to a stimulus
5. Identify which of these types of sampling is used: random, systematic, convenience, stratified, or cluster.
  - a) The Gallup Organization plans to conduct a poll of New York City residents with the “212” area code. Computers are used to randomly generate telephone numbers that are automatically called.
  - b) An ABC news reporter polls people as they pass him on the street.
  - c) A Johns Hopkins University researcher surveys all cardiac patients in each of 30 randomly selected hospitals.
  - d) The Dutchess County Commissioner of Jurors obtains a list of 42, 763 car owners and constructs a pool of jurors by selecting every 100<sup>th</sup> name on that list.
  - e) The College of Newport conducts a study of student drinking by randomly selecting 10 different classes and interviewing all of the students in each of those classes.
  - f) A marketing expert for MTV is planning a survey in which 500 people will be randomly selected from each age group of 10 – 19, 20 – 29, and so on.

6. The mathematical science that deals with collecting, simplifying, and describing data as well as making inferences based on the analysis of data is called \_\_\_\_\_.
7. A numerical measure made upon an entire population is called a \_\_\_\_\_.
8. A numerical measure made upon the values in a sample is called a \_\_\_\_\_.
9. The Bureau of Census collects information about employment status from a sample of approximately 65,000 households. The Bureau of Labor Statistics reports monthly unemployment rates that are based on this information. The unemployment rate is an example of which of the following?
- a) parameter
  - b) data value
  - c) statistic
  - d) sample
10. A researcher takes a random sample of 750 college students and uses this sample to conclude that college students usually work 10 to 15 hours a week at a part-time job. The researcher is using
- a) descriptive statistics
  - b) inferential statistics
  - c) differential calculus
  - d) the parameter method
11. It is known from experience that 15% of a restaurant's customers order fried chicken on a given night. A researcher collects data on 10 randomly selected nights and finds that 17% of the customers ordered fried chicken. Identify the parameter and the statistic in this situation.