## WORKSHEET

(Chapter 1: sections 1.1.,1.2,1.3)

- 1. Identify the population and the sample:
- a) A survey of 1353 American households found that 18% of the households own a computer.
- b) A recent survey of 2625 elementary school children found that 28% of the children could be classified obese.
- c) The average weight of every sixth person entering the mall within 3 hour period was 146 lb.
- 2. Determine whether the numerical value is a parameter or a statistics (and explain):
  - a) A recent survey by the alumni of a major university indicated that the average salary of 10,000 of its 300,000 graduates was 125,000.
  - The average salary of all assembly-line employees at a certain car manufacturer is
  - The average late fee for 360 credit card holders was found to be \$56.75.
- 3. For the studies described, identify the population, sample, population parameters, and sample statistics:
  - a) In a USA Today Internet poll, readers responded voluntarily to the question "Do you consume at least one caffeinated beverage every day?"
  - b) Astronomers typically determine the distance to galaxy (a galaxy is a huge collection of billions of stars) by measuring the distances to just a few stars within it and taking the mean (average) of these distance measurements.
- 4. Identify whether the statement describes inferential statistics or descriptive statistics:
  - a) The average age of the students in a statistics class is 21 years.
  - b) The chances of winning the California Lottery are one chance in twenty-two million.
  - There is a relationship between smoking cigarettes and getting emphysema.
  - d) From past figures, it is predicted that 39% of the registered voters in California will vote in the June primary.
- 5. Determine whether the data are qualitative or quantitative:
  - a) the colors of automobiles on a used car lot
  - b) the numbers on the shirts of a girl's soccer team
  - c) the number of seats in a movie theater
  - d) a list of house numbers on your street
  - e) the ages of a sample of 350 employees of a large hospital
- 6. Identify the data set's level of measurement (nominal, ordinal, interval, ratio):
  - a) hair color of women on a high school tennis team
  - b) numbers on the shirts of a girl's soccer team
  - c) ages of students in a statistics class
  - d) temperatures of 22 selected refrigerators
  - e) number of milligrams of tar in 28 cigarettes
  - number of pages in your statistics book