Name:	Statistics

## Homework 1-4,1-5 Review

1. Information from research studies is sometimes taken out of context. Explain why the claims of these studies might be suspect.

- a. Based on a recent telephone survey, 72% of those contacted shop online.
- b. In Greenville County there are 8324 deer.
- c. Nursing school graduates from Fairview University earn on average \$33,456.
- d. Only 5% of the men surveyed was the dishes after dinner.
- e. A recent study shows that high school dropouts spend less time on the Internet than those who graduated; therefore, the Internet raises your IQ.
- f. Most shark attacks occur in ocean water that is 3 feet deep; therefore, it is safer to swim in deep water.

## 2. Identify each study as being either observational or experimental.

- a. Subjects were randomly assigned to two groups, and one group was given an herb and the other group a placebo. After 6 months, the numbers of respiratory tract infections each group had were compared.
- b. A researcher stood at a busy intersection to see if the color of the automobile that a person drives is related to running red lights.
- c. A researcher finds that people who are more hostile have higher total cholesterol levels than those who are less hostile.
- d. Subjects are randomly assigned to four groups. Each group is placed on one of four special diets a low-fat diet, a high-fish diet, a combination of low-fat diet and high-fish diet, and a regular diet. After 6 month, the blood pressures of the groups are compared to see if diet has any effect on blood pressure.

## 3. Identify the independent variable(s) and the dependent variable for each of the studies.

- a. Subjects were randomly assigned to two groups, and one group was given an herb and the other group a placebo. After 6 months, the numbers of respiratory tract infections each group had were compared.
- b. A researcher stood at a busy intersection to see if the color of the automobile that a person drives is related to running red lights.
- c. A researcher finds that people who are more hostile have higher total cholesterol levels than those who are less hostile.
- d. Subjects are randomly assigned to four groups. Each group is placed on one of four special diets

   a low-fat diet, a high-fish diet, a combination of low-fat diet and high-fish diet, and a regular diet. After 6 month, the blood pressures of the groups are compared to see if diet has any effect on blood pressure.