Name: _____   Date: _____

Survey Sampling

Instructions:

Read the survey sampling scenario below. Then, read the questions that follow. Re-read the scenario focused on the questions. Finally, write your response to each question.

Scenario

A researcher was asked to design an investigation based on the following research question:

Do American adult males spend more of their prime time hours online or watching regular television?
(Prime time is defined as weekday evenings from 7pm to 9pm)

The researcher decided to conduct a survey sample. He determined that he would choose 1,000 American males over the age of 18 through a landline telephone survey. The researcher would randomly select the telephone numbers of adult males that live on the east coast of the United States.

Answer the following questions:

1. What is the target population and what is the sample?

2. Describe what 'bias' means. If a bias exists in the scenario you just read, explain why the sampling plan might be biased.

3. If a sampling plan is biased, what can the researcher do to reduce the bias?

4. A study was conducted at a particular high school about whether girls that attend that school prefer Red Vines® or Twizzlers®. Identify the following as either a parameter or a statistic by circling the correct term:

    a. A random sample of 100 girls was selected. The results were that 40% preferred Red Vines®. The number "40%" is:

        Parameter   or   Statistic

    b. All of the girls at the high school were asked about their preference. The results were that 45% preferred Red Vines®. The number "45%" is:

        Parameter   or   Statistic