Name Date

Practice A

10.6

Identify the population and the sample.

 1. All students in a school 2. 75 strawberries in the field

 30 students in the school All the strawberries in the field

 3. You want to know the number of students in your school who read some of the newspaper at least once a week. You survey 30 random students that you meet in the hallway between classes.

 a. What is the population of your survey?

 b. What is the sample of your survey?

 c. Is the sample biased or unbiased? Explain.

Which sample is better for making a prediction? Explain.

|  |
| --- |
| Predict the number of residents in St. Lucie County who own a home. |
| Sample A | A random sample of 100 residents in the county |
| Sample B | A random sample of 100 residents in the city of Fort Pierce |

 4.

|  |
| --- |
| Predict the number of people at a beach who are wearing sunscreen. |
| Sample A | A random sample of 50 people at the beach |
| Sample B | A random sample of 5 people at the beach |

 5.

Determine whether you would survey the population or a sample. Explain.

 6. You want to know the average weight of the members of your family.

 7. You want to know the number of grocery stores in Florida that carry your favorite cereal.

 8. A survey asked 60 randomly chosen students if they eat school lunch. Forty said yes. There were 560 school lunches sold today. Predict the number of students who attend the school.

Name Date

Practice B

10.6

 1. You want to know the number of fans at the Miami Dolphins and Dallas Cowboys game that think the Dolphins will win. You survey 50 fans with season tickets for the Dolphins.

 a. What is the population of your survey?

 b. What is the sample of your survey?

 c. Is the sample reasonable? Explain.

 2. Which sample is better for making a prediction? Explain.

|  |
| --- |
| Predict the number of families in your town with two or more children. |
| Sample A | A random sample of 10 families living near your home |
| Sample B | A random sample of 10 families living in your town |

Determine whether you would survey the population or a sample. Explain.

 3. You want to know the favorite clothing store of the students at your school.

 4. You want to know the favorite topic of students in your history class.

 5. An administrator surveys a random sample of 48 out of 900 middle
school students. Using the survey results, the administrator predicts
that 225 students are in favor of the new dress code. How many of
the 48 students surveyed were in favor of the new dress code?

 6. The table shows the results of a survey
of 75 randomly chosen individuals. In
the survey, each individual was asked
to name his or her favorite type of music.

|  |  |
| --- | --- |
| Music | Frequency |
| Rock | 20 |
| Country | 23 |
| Rap | 30 |
| Classical | 2 |

 a. Do you think the individuals surveyed
were adults or teenagers? Explain your
reasoning.

 b. What other data displays could be used to show the data?

 c. If you were to repeat the survey using randomly chosen adults, would you predict that the results of the adult survey will be different if you surveyed adults in their 30s versus adults in their 70s? Explain your reasoning.