For use with the lesson "Select and Draw Conclusions from Samples"

Identify the type of sample described. Then tell if the sample is biased. *Explain* your reasoning.

- **1.** A newspaper is conducting a survey to find out people's favorite sport. The newspaper asks every other person attending a baseball game.
- **2.** A pet store wants to know what is people's favorite animal. The store places survey cards at a table for customers to fill out when they enter the store.
- **3.** A health club wants to know how often members attend an aerobics class. The club asks members that have just finished taking an aerobics class.

Find the margin of error for a survey that has the given sample size. Round your answer to the nearest tenth of a percent.

Find the sample size required to achieve the given margin of error. Round your answer to the nearest whole number.

12.
$$\pm 7\%$$

17.
$$\pm 2.2\%$$

In Exercises 20 and 21, use the following information.

Internet In a survey of 802 people, 16% said that they use the Internet or e-mail more than 10 hours per week.

- **20.** What is the margin of error for the survey? Round your answer to the nearest tenth of a percent.
- **21.** Give an interval that is likely to contain the exact percent of all people who use the Internet or e-mail more than 10 hours per week.

In Exercises 22–24, use the following information.

High School Addition The school board wants to find out how the community feels about a proposed addition to the high school. There are 15,000 people living in the school district. The school board would like to survey 800 people.

- **22.** Describe a method for selecting an unbiased, random sample of people who live in the school district.
- **23.** Describe a method for selecting people who live in the school district that would be biased.
- **24.** Describe a method for selecting people who live in the school district that would not be random.