- **23.** At the next football game, ask every fifth person if he or she would be more likely to buy a baked good or a raffle ticket.
- 24. Survey every member of the marching band.
- 25. Survey every customer at an upcoming bake sale that the art club is holding.
- **26.** *[// ERROR ANALYSIS /// The dance team wants to find out whether the student body at their school enjoyed their last production. They decide to have the dancers from the last production go around the school and randomly survey students by asking them the question "Did you like our last production?" Explain what is wrong with this method.*

One hundred students out of 800 at a school were surveyed. The results are recorded in each problem below. Predict the number of students in the population that would answer similarly.

- 27. Twenty-five said they attended the fall play.
- **28.** Seventy-eight said they rode the bus to school.
- 29. Eighty-two said they had taken an art class as an elective.
- **30.** Sixty-four said they were members of an extracurricular club.
- **31.** Sixty-five said they played a sport.
- **32. Estimation** In a survey of 100 students, about 32 reported that they lived within walking distance of the school. The school has 893 students. Use mental math to estimate how many students in the school are within walking distance.
- **HOT** 33. Critical Thinking A town recently passed a leash law for dogs. A survey asks whether the town should designate an off-leash area where dogs can roam freely in the town park. The results of the survey are shown below.

Should Spruce Park have an off-leash area?* Yes 92% No 8% *From a survey of 100 dog owners

Based on the results of the survey, the town designates the off-leash area. Was this a good decision? Explain why it was a good decision or, if not, suggest a better way to gather information to make a better decision.



TEST PREP

- **34.** In a survey of 80 students, 25 said that they planned on attending the pep rally. The school has 550 students. Predict the number of students who plan to attend the pep rally.
 - (A) 55 students
 - B 80 students
 - ① 172 students
 - ① 378 students