

**LESSON  
10.1****Practice C***For use with the lesson "Analyze Surveys and Samples"*

**In Exercises 1 and 2, identify the population and classify the sampling method.**

1. Your school's administrators want to know where students want to go on the class trip at the end of the year. The administrators randomly survey 30 freshmen, 30 sophomores, 30 juniors, and 30 seniors.
2. The manager at a local bookstore is selecting authors that can come in and give readings from the authors' recently published books. The bookstore surveys every other person who buys books at the store to determine which authors will bring in the biggest audience.

**Tell whether the survey method used is likely to result in a biased sample.**

3. The owners of an ice cream shop want to determine whether or not they should keep their stores open an hour later. They survey the customers in one of their stores at random.
4. A group of students at your school wants to gather information about the need for additional funding for the school library. They survey every third person in the library.

**In Exercises 5 and 6, tell whether the question is potentially biased. Explain your answer.**

5. Do you think that the city bus schedule should run later?
6. Don't you agree that a new baseball stadium should be built because baseball is America's favorite sport?

**In Exercises 7 and 8, explain why the question is biased. Then rewrite it so that it is not.**

7. Don't you agree that it is better to offer two hot lunches on the menu rather than a cold lunch and a hot lunch?
8. Don't you agree that a moped is more fun to ride than a bicycle?
9. **School Sports** You plan to report on the choice of sports in your school for your school's newspaper. *Describe* how you could choose a representative sample. *Justify* your sampling method. Then write at least one unbiased question you could use to collect information on which sport students would like added to the school program the most. *Explain* why your question is unbiased.
10. **Stratified Random Sample** A stratified random sample of a population is used for a survey that contains unbiased questions. *Explain* how it is possible for the survey to be biased. *Describe* a situation in which this might occur.