

11-8 Standardized Test Prep

Samples and Surveys

Multiple Choice

For Exercises 1–4, choose the correct letter.

- The School Dance Committee conducts a survey to find what type of music students would like to hear at the next dance. Which sampling method is *least* likely to result in a biased sample?
 - Call 20% of the people in the senior class directory.
 - Interview every 10th student as they enter the school.
 - Ask every 5th person leaving a school orchestra concert.
 - Set up a jazz website where students can list their 3 favorite songs.
- A news reporter wants to determine what types of movies are most popular in her city. She surveys the first 20 people leaving a movie theater at 8:00 P.M. on a Friday. Which best describes the sampling method used in this situation?
 - convenience sample
 - self-selected sample
 - random sample
 - systematic sample
- A veterinarian monitors a litter of 8 kittens and records their ages in days when they first open their eyes. Which type of study method was used in this situation?
 - controlled experiment
 - observational study
 - random sample
 - survey
- A high-school principal wants to determine how students feel about a new gym that has been proposed for the school. Which survey question is most likely to yield information that has no bias?
 - Do you think that the school should build a new gym?
 - Do you think that building a new gym will be a waste of money?
 - Shouldn't the school build a new gym to promote healthy exercise?
 - Should the school build a new gym when the science lab is outdated?
- The manager of an athletic store selects every tenth name on a list of the players in a city baseball league for middle school students. He asks each selected player what brand of glove he or she uses while playing baseball. Assuming that the sample accurately reflects the population, what is the population in this situation?
 - all baseball players in the city
 - all customers of the athletic store
 - all baseball players in the league
 - all middle school students in the city

Short Response

- Describe a sampling method you could use to find the type of music that is most popular among students at your school. Tell why the sample is unlikely to have a bias.