

SECTION

7B

Ready to Go On? Skills Intervention**7-8 Identifying Sampling Errors and Bias**

A **biased sample** is a sample that does not fairly represent the population. A **biased question** is a question that leads people to give a certain answer.

Vocabulary

biased sample

biased question

Identifying Potentially Biased Samples

Determine whether each sample may be biased. Explain.

- A** A marketing company surveys 200 students in a town by randomly choosing names from a list of all the students in the town.

Is the sample a random sample? _____ Is the sample biased? _____

- B** The first 100 people entering a basketball game are surveyed to find which sport most people in the city enjoy watching.

Is it likely that not everyone in the city likes basketball? _____

Is the sample a random sample? _____ Is the sample biased? _____

- C** A printing company randomly checks 150 books out of 20,000 that were printed to see if any major errors occurred.

Is the sample a random sample? _____ Is the sample biased? _____

Identifying Potentially Biased Questions

Determine whether each survey question may be biased. Explain.

- A** Do you think Chloe or Maria should be elected as class president?

Does the question lead people to choose one person over the other? _____

Is the question biased? _____

- B** Don't you agree that there should be more frequent garbage pickups?

Does the question lead people to say yes? _____

Is the question biased? _____

- C** Do you prefer a nice cool glass of raspberry lemonade or just a drink of water?

Which beverage would most people be more likely to choose?

Is the question biased? _____

- D** How many times a day do you check your email?

Does the question lead people to give a particular answer? _____

Is the question biased? _____

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Ready to Go On? Problem Solving Intervention

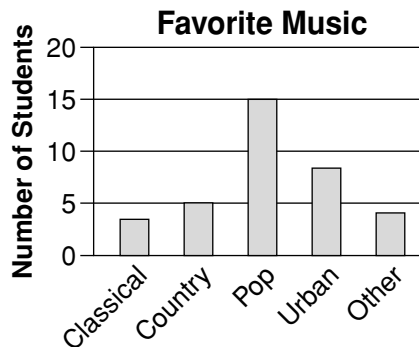
7-8 Identifying Sampling Errors and Bias

Olivia conducts a survey to find the favorite type of music of students in her school. Determine whether Olivia’s claim is valid. Explain.

Sample: 35 sixth grade girls at cheerleading practice

Question: What is your favorite type of music?

Claim: Most students in the school prefer pop music over any other type.



Understand the Problem

1. What information are you given?

2. What do you need to find? _____

Make a Plan

3. To decide whether a claim based on a survey is valid, you need to check whether the _____ or the _____ is biased.

Solve

4. Is the sample biased? Explain. _____

5. Is the question biased? Explain.

6. Is the claim valid? Explain.

Check

7. Do you think it would make a difference if Olivia surveyed 35 students that were randomly selected from the school roster? Explain.
