

Chapter 11 Review

Key Words

For #1 to #9, write the number that matches the description.

- | | |
|---|---------------------------------|
| 1. an example is every 10th person in a line-up | _____ convenience sample |
| 2. bias and cost are examples of these | _____ population |
| 3. an example is polling 2 students out of 100 about who will win an election | _____ influencing factors |
| | _____ sample |
| 4. an example is the first 30 people entering the gates at a football game | _____ biased sample |
| 5. any group of individuals selected from a population | _____ voluntary response sample |
| | _____ random sample |
| 6. a specific number of people selected from a population | _____ systematic sample |
| 7. the whole group of people being studied | _____ stratified sample |
| 8. an example is dividing the population into males and females and then randomly selecting a proportional number from each group | |
| 9. an example is a population invited to call in to a radio talk show | |

11.1 Factors Affecting Data Collection, pages 618–624

10. Name 1 influencing factor for each situation.

Influencing factors:

- bias
- use of language
- ethics
- cost
- time and timing
- privacy
- cultural sensitivity

- a) Ask the first 40 people entering a park office if they think parks are worth the cost.

- b) Ask 10 randomly chosen grade 8 students if the grade 12 students should have a special dance.

- c) Ask 15 juice drinkers if they support replacing juice in the vending machine with bottled water.

Name: _____ Date: _____

- 11.** Write 1 influencing factor that may affect data collection.
Then, rewrite the survey question.

- a)** You look like a good citizen. Do you support more money for hospitals?

Influencing factor: _____

Rewrite question: _____

- b)** Everybody loves The Rockets. Who is your favourite rock group?

Influencing factor: _____

Rewrite question: _____

- c)** Do you prefer ice hockey or cake after school?

Influencing factor: _____

Rewrite question: _____

11.2 Collecting Data, pages 626–634

- 12.** Identify the population for each situation. Then, describe how you would select a sample for each.

- a)** the spending habits of teens in Canada

Population: _____

I would select a sample by _____.

- b)** the popularity of different kinds of music in your school

Population: _____

I would select a sample by _____.

- c)** the cost of gasoline in your community

Population: _____

I would select a sample by _____.

Name: _____ Date: _____

13. For each situation, identify the type of sample. Identify any bias in each sample.

Types of samples:

- convenience
- voluntary
- random
- stratified
- systematic

- a)** Survey the first 20 shoppers to enter the north entrance of a mall.

Sample type: _____

There could be bias because _____

_____.

- b)** Divide youth conference delegates into groups according to the western province or territory where they live. Then, randomly select 20 youths from each group.

Sample type: _____

There could be bias because _____.

- c)** The area supervisor for a fast-food chain selects employees at 1 store location.

Sample type: _____

There could be bias because _____.

_____.

14. What type of sample do you suggest for each situation?

Give 1 reason for your choice.

- a)** a survey of customers to find out their favourite sundae topping

Type: _____

Reason: _____

_____.

- b)** a survey of doctors, nurses, and hospital administrators to find out if the hospital needs to add more patient rooms

Type: _____

Reason: _____

_____.