

Name: _____

Date: _____

Lesson 26: Homework (Day1)

- 1) A town council is thinking about buying land to establish a recreational area for all citizens of the town. To see if the townspeople would approve of the purchase, a survey is to be mailed out to a sample of town residents. The options for the survey are as follows: the first 50 people to exit the town grocery store, the first 50 people to exit the high school football game, the first 25 women to exit the shopping mall, or 40 randomly selected town residents from the phone book. Identify which sample would be the most representative of town voters. Then explain what makes each of the other samples not representative.

Sakiya surveyed students in her school about their favorite sports. On Monday, she randomly surveyed 85 students in the cafeteria. On Tuesday, she surveyed 15 of her teammates on the school soccer team. Which statement **best** describes the samples Sakiya used?

- A** Neither sample represents the school population.
- B** Both samples likely represent the school population.
- C** The data gathered on Tuesday most likely represent the school population, but the data gathered on Monday most likely do not.
- D** The data gathered on Monday most likely represent the school population, but the data gathered on Tuesday most likely do not.

Reason and Write

Study the example. Underline two parts that you think make it a particularly good answer and a helpful example.

Example

Select a topic and a population from the lists below for a survey.

Topic

Favorite store at the local mall

Favorite snack

Time to get to work or school

Population

Teachers in your school

Students in your school

Shoppers at the local mall

Describe the attributes of the people that should be represented in a random sample of your population.

Then describe a sample for this population that could be considered biased. Explain why it might be biased.

Show your work. Use words to explain your answer.

- a) Describe the attributes of the people that should be represented in a random sample of your population.

Show your work.

- b) Then describe a sample for this population that could be considered biased. Explain why it might be biased.

This population could be considered biased because _____

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Lesson 26: Exit Ticket(Day1)

- 1** Janine and Miguel are planning the activities for a student event and want to survey a random sample of students about what relay races to have. Janine suggests asking all the students on the track team, both boys and girls, about their relay preferences. Miguel says that this would be a biased sample. Is Miguel correct? Explain.

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Lesson 26: Homework (Day2)

- 1** Karina and Juan are planning the food for a student event and want to survey a random sample of students about what food to serve. Karina suggests asking all the student soccer players, both boys and girls, about their food preferences. Juan says that this would be a biased sample. Is Juan correct? Explain.

Describe a way to find a random sample of local parents to survey about what structures and equipment to include in a planned playground at a newly constructed park.

Describe a way to find a random sample of students to survey about what foods to include on the revised school lunch menu.

- 7** A community center employee plans to start a new after school activity for local high school students and is trying to decide whether to offer a music, sports, art, or tutoring program.

Part A

Which survey method would likely produce a representative sample of local high school students' preferences? Choose all that apply.

- A** Ask one high school participant from every sports team currently run by the community center.
- B** Ask the local high school to select every fifth pupil from an alphabetical list and ask those students to participate in a survey.
- C** Send a survey to every community center employee whose name begins with a letter in the first half of the alphabet.
- D** Mail a survey addressed to the homeowner of every fourth house within five blocks of the community center.
- E** Deliver surveys to the homes of high school students who live within one mile of the community center, addressed to the student.

Part B

Explain why each of the survey methods you did not select in Part A would not be likely to produce a representative sample of local high school students' preferences.
