

State the population. Identify each sample as GOOD SAMPLE or BIASED SAMPLE.

1. A math teacher at Generic Middle School wants to know, on a scale of 1 to 10, how much students in the middle school enjoy math class. The teacher decides to sample some students.

POPULATION = Students at Generic Middle School

Samples:

- a. Twenty students on the math team.

GOOD SAMPLE or BIASED SAMPLE

- b. Twenty students whose names were picked out of hat that contained the names of all the students.

GOOD SAMPLE or BIASED SAMPLE

- c. Twenty students who earned high grades in their math classes last year.

GOOD SAMPLE or BIASED SAMPLE

- d. Twenty students who failed their math classes.

GOOD SAMPLE or BIASED SAMPLE

2. The Chicago Bears and playing the Denver Broncos in a football games one weekend. Luca wants to know which team football fans think will win the game.

POPULATION = Football fans

Samples:

- a. Fifty randomly selected fans from across the United States.

GOOD SAMPLE or BIASED SAMPLE

- b. Fifty randomly selected fans in Denver.

GOOD SAMPLE or BIASED SAMPLE

- c. Fifty randomly selected fans in Green Bay which is the Bears biggest rival.

GOOD SAMPLE or BIASED SAMPLE

- d. Five randomly selected fans from school.

GOOD SAMPLE or BIASED SAMPLE

Label the following as GOOD QUESTION or BIASED QUESTION.

3. Everyone loves the new Top Gun movie more than the first Top Gun. Which Top Gun movie do you think is better?

GOOD QUESTION or BIASED QUESTION

4. In your opinion, how would you rate the quality of learning in your Math and English class?
Excellent Good Fair Poor

GOOD QUESTION or BIASED QUESTION

5. I am satisfied with our school lunch.
Strongly Agree Agree Disagree Strongly Disagree

GOOD QUESTION or BIASED QUESTION

Use the survey question to answer the following.

Should concerned parents use infant car seats?

6. Explain why this survey question a leading question?

The question includes the phrase "concerned parents" which could make parents want to agree so that they seem like "concerned parents".

7. Rewrite the survey question so that it is not biased.

Should parents use infant car seats?

or

Parents should use infant car seats.

Strongly Agree Agree Disagree Strongly Disagree

Use the scenario to answer the following.

8. A company is interested in opening a gym on its premise for all employees. They ask all 3rd shift workers the following question.

"I would be interested in using a gym located on the premise of work."

Strongly Agree Agree Disagree Strongly Disagree

Population = Employees at the company

Sample = 3rd shift workers

Is the sample a GOOD SAMPLE or BIASED SAMPLE?

Is the question a GOOD QUESTION or BIASED QUESTION ?