

8) Carol wants to find out the favorite foods of students at her middle school. She asked the boys' basketball team about their favorite foods. Is Carol's sample a random sample? Explain.

No, b/c it is only students on the team & not all students

9) Karim wants to know what day of the week students at his school prefer. He numbered each seat in the cafeteria, wrote them on slips of paper, and placed them in a box with a lid. He then drew a number out of the box twenty times. He completed this process during all three lunches. Is Karim's sample a biased sample? Explain.

No, b/c by drawing numbers it was a random sample

10) Determine if the following question is biased or random, circle the answer below.

Jacy wants to find out what type of art her fellow students enjoy the most. She asked her classmates, "What is your favorite type of art?"

Biased

Random

If it is biased, what question should Joey ask for it to be random?

11) In a survey about new bike paths, which group is least likely to be a biased sample?

- A) randomly-chosen gym members
- B) randomly-chosen dog walkers

- C) randomly-chosen drivers
- D) randomly-chosen voters

12) Nancy hears a report that the average price of gasoline is \$2.82. She averages the prices of stations near her home. She finds the average price of gas to be \$3.03. Why are the averages different?

Nancy only looked at the stations around her house & not throughout the nation.

13) Members of a polling organization surveyed 700 registered voters by using a computer program to choose names from a list of all registered voters. Is the sample random or biased? Explain.

Random b/c names were drawn from a random polling example

14) Dallas wants to know what elective subjects the students at his school like best. He surveys students who are leaving band class. Is the sample random or biased? Explain.

Biased b/c only the one class is being polled, not students from the whole school.

15) Why does the following question show bias in a survey of a town's citizens about a new professional sports stadium?

not biased

biased.

"What are your feelings about a new stadium that will bring in a professional sports teams and the possibility of more business development by hotels and restaurants in our town?"

Because it is guiding their answers instead of just asking opinion