

NAME: _____

1. fall0707ia, P.I. A.S.14
Which situation describes a correlation that is *not* a causal relationship?
[A] The more powerful the microwave, the faster the food cooks.
[B] The rooster crows, and the Sun rises.
[C] The more miles driven, the more gasoline needed.
[D] The faster the pace of a runner, the quicker the runner finishes.
2. 080908ia, P.I. A.S.13
Which relationship can best be described as causal?
[A] number of students in a class and number of students with brown hair
[B] height and intelligence
[C] shoe size and running speed
[D] number of correct answers on a test and test score
3. fall0714ia, P.I. A.S.2
Which situation should be analyzed using bivariate data?
[A] Ms. Saleem keeps a list of the amount of time her daughter spends on her social studies homework.
[B] Mr. DeStefan records his customers' best video game scores during the summer.
[C] Mr. Benjamin tries to see if his students' shoe sizes are directly related to their heights.
[D] Mr. Chan keeps track of his daughter's algebra grades for the quarter.
4. 060819ia, P.I. A.S.1
Which data set describes a situation that could be classified as qualitative?
[A] the opinions of students regarding school lunches
[B] the shoe sizes of players on the basketball team
[C] the ages of presidents at the time of their inauguration
[D] the elevations of the five highest mountains in the world
5. 060905ia, P.I. A.S.1
Which data set describes a situation that could be classified as qualitative?
[A] the ages of the students in Ms. Marshall's Spanish class
[B] the test scores of the students in Ms. Fitzgerald's class
[C] the heights of the players on the East High School basketball team
[D] the favorite ice cream flavor of each of Mr. Hayden's students

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6. 010815b, P.I. A.S.3

Which method of collecting data would most likely result in an unbiased random sample?

- [A] selecting students by the last digit of their school ID number to participate in a survey about cafeteria food
- [B] placing a survey in a local newspaper to determine how people voted in the 2004 presidential election
- [C] surveying honor students taking Mathematics B to determine the average amount of time students in a school spend doing homework each night
- [D] selecting every third teenager leaving a movie theater to answer a survey about entertainment

7. 060803ia, P.I. A.S.3

A school wants to add a coed soccer program. To determine student interest in the program, a survey will be taken. In order to get an unbiased sample, which group should the school survey?

- [A] every member of the varsity football team
- [B] every member in Ms. Zimmer's drama classes
- [C] every student having a second-period French class
- [D] every third student entering the building

8. 010923ia, P.I. A.S.3

A survey is being conducted to determine which types of television programs people watch. Which survey and location combination would likely contain the most bias?

- [A] surveying 10 people who work in a sporting goods store
- [B] randomly surveying 50 people during the day in a mall
- [C] randomly surveying 75 people during the day in a clothing store
- [D] surveying the first 25 people who enter a grocery store

9. 080910ia, P.I. A.S.3

Erica is conducting a survey about the proposed increase in the sports budget in the Hometown School District. Which survey method would likely contain the most bias?

- [A] Erica asks every fifth person leaving Saturday's Hometown High School football game.
- [B] Erica asks every third person leaving the Hometown Shopping Mall this weekend.
- [C] Erica asks every fifth student entering Hometown High School on Monday morning.
- [D] Erica asks every third person entering the Hometown Grocery Store.

[1] B _____

[2] D _____

[3] C _____

[4] A _____

[5] D _____

[6] A _____

[7] D _____

[8] A _____

[9] A _____