# Correlation vs Causation: Worksheet
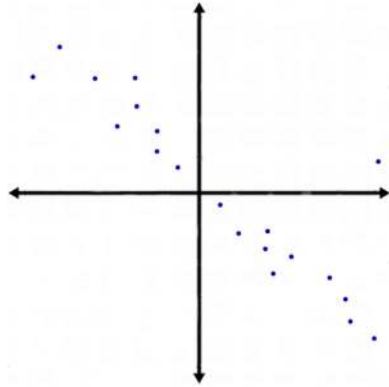
<u>Fill in the blank</u>:

1. _____ correlated variables increase and decrease together.

2. _____ correlated variables means that one variable will increase as the

other variable decreases.

3. When making predictions, it's better to use data that _____ correlates as

opposed to data that _____ correlates.
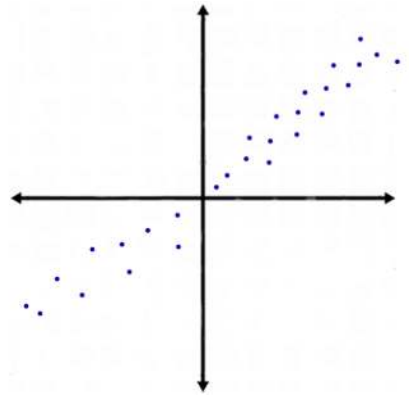
<u>Short Answer</u>:
4. What's the purpose of a scatter plot?

5. List three possible explanations for why two variables may correlate.

6. What's the difference between correlation and causation?

7. <u>Critical Thinking</u>: Why is it important to differentiate between correlation and causation?

8. Look at the graphs below. Draw a regression line and describe the kind of correlation shown (i.e. strength and direction).
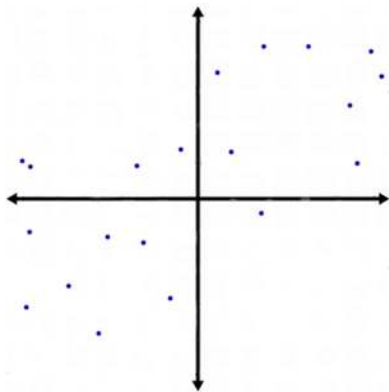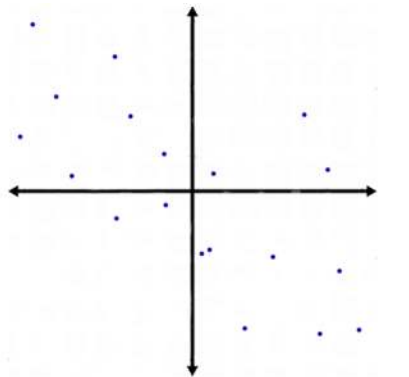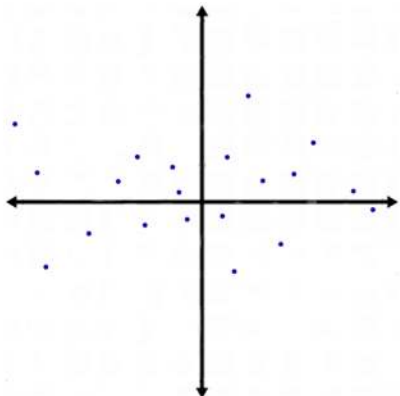
Graph A:

Graph B:

Graph C:

Graph D:

Graph E:

Graph F: