Write *positive, negative,* or *none* to describe the correlation in each scatter plot.
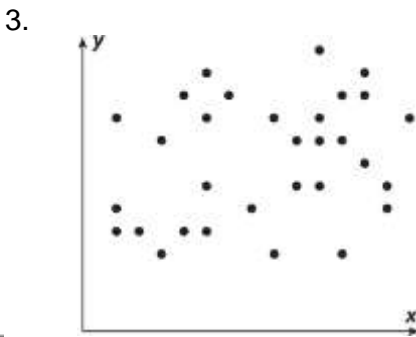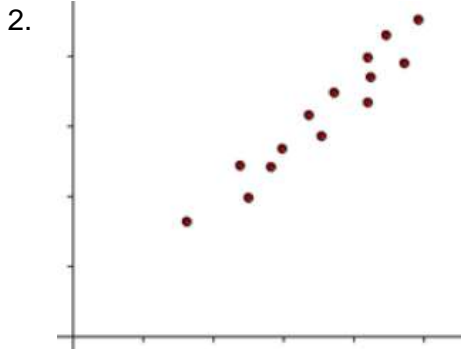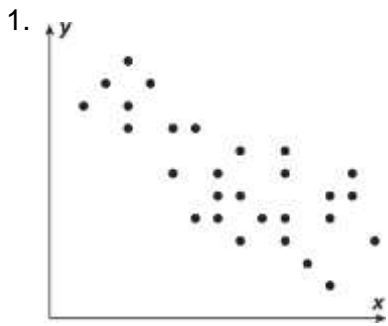
1.

2.

3.

For 4 & 5, say whether you would expect a positive, negative, or no correlation. Explain your reasoning for each.
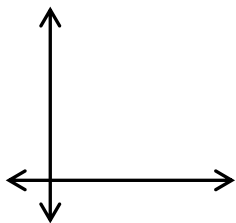
4) The number of minutes spent reading a book and the number of pages you have read in the book

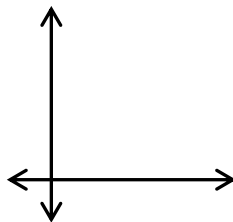5) Your shoe size as you get older and the number of baby teeth you still have

6) When looking at questions 4 and 5, which of these are likely to be *causation* relationships: #4, #5, both, or neither? Explain your reasoning.

On each coordinate plane, draw a scatter plot that could have the given correlation coefficient.

7) r = 0.8

8) r = -0.4

9) a) Which of the following would <u>most accurately</u> be represented by this scatter plot?

A. Height of a person vs. weight of a person

B. Time spent reading a book vs. number of pages left in the book

C. Time spent writing an essay and number of words written on the essay

D. A person's shoe size vs. their grade point average in school

b) **EXPLAIN** your answer.