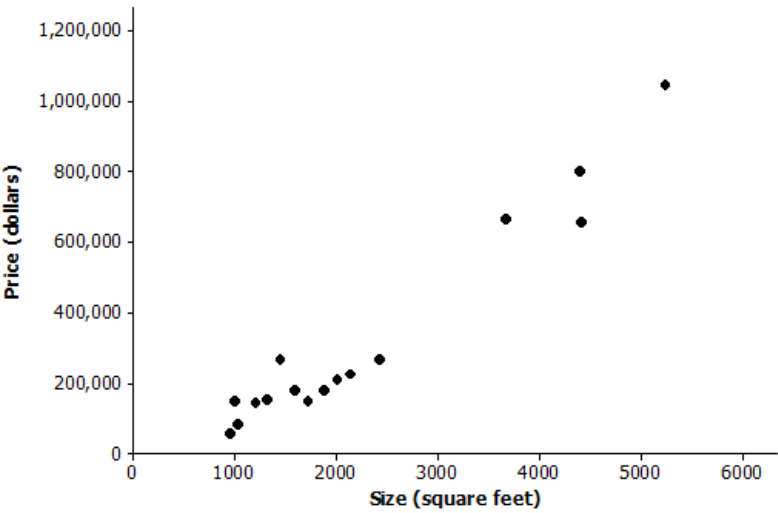
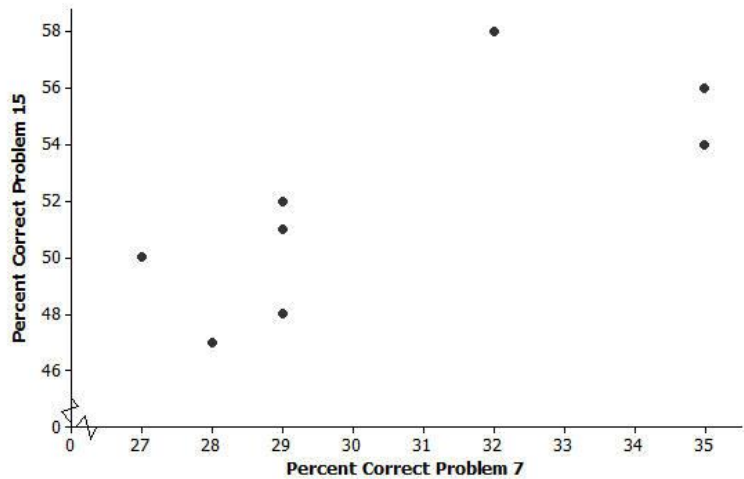


1. The scatter plot to the right was constructed using data size in square feet (x) and price in dollars (y) for a sample of houses. Write a few sentences describing the relationship between price and size for these houses. Are there any noticeable clusters or outliers?



2. The table below shows the percent of students in the northeastern states (as defined by the U.S. Census Bureau) who answered problems 7 and 15 correctly on the 2011 eighth-grade test. The scatter plot shows the percent of eighth-grade students who got problems 7 and 15 correct on the 2011 NAEP.

Percent Correct for Problems 7 and 15 on 2011 Eighth-Grade NAEP

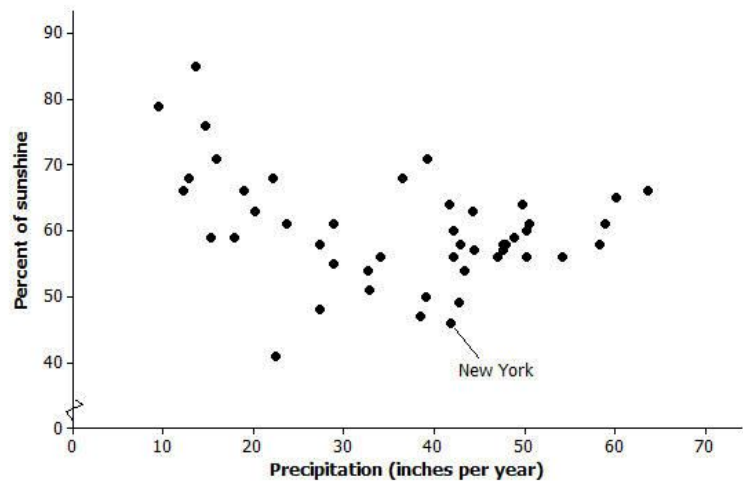


State	% Correct Problem 7	% Correct Problem 15
Connecticut	29	51
New York	28	47
Rhode Island	29	52
Maine	27	50
Pennsylvania	29	48
Vermont	32	58
New Jersey	35	54
New Hampshire	29	52
Massachusetts	35	56

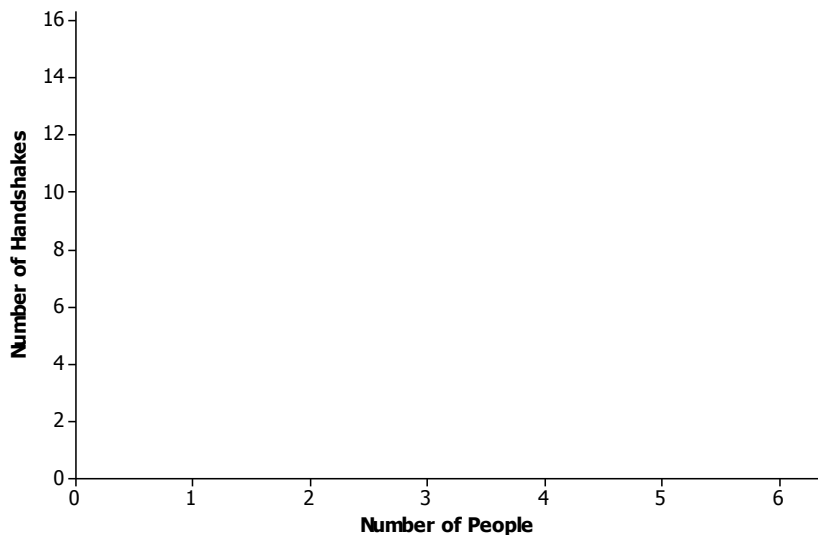
- a. Why does it appear that there are only eight points in the scatter plot for nine states?
- b. What is true of the states represented by the cluster of five points in the lower left corner of the graph?
- c. Which state did the best on these two problems? Explain your reasoning.
- d. Is there a trend in the data? Explain your thinking.

3. The plot to the right shows the mean percent of sunshine during the year and the mean amount of precipitation in inches per year for the states in the United States.

- a. Where on the graph are the states that have a large amount of precipitation and a small percent of sunshine?
- b. New York State is the point (46, 41.8). Describe how the mean amount of precipitation and percent of sunshine in New York compare to the rest of the United States.
- c. Write a few sentences describing the relationship between mean amount of precipitation and percent of sunshine.



4. Think about shaking hands with people.
- a. If three people are in a room and everyone shakes hands with everyone else, how many handshakes will there be?
 - b. Make a table for the number of handshakes in the room for one to six people.
 - c. Make a scatter plot of number of people (x) and number of handshakes (y). Explain your thinking.



Number people	Handshakes

- d. Does the trend seem to be linear? Why or why not?