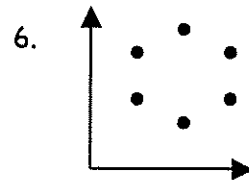
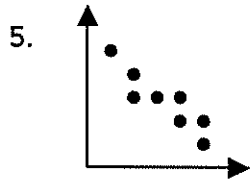
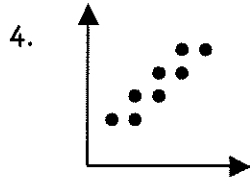
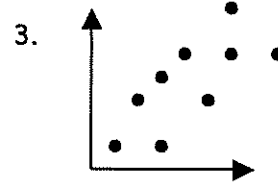
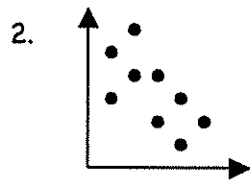
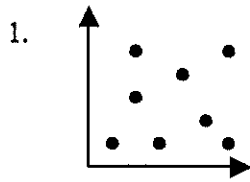


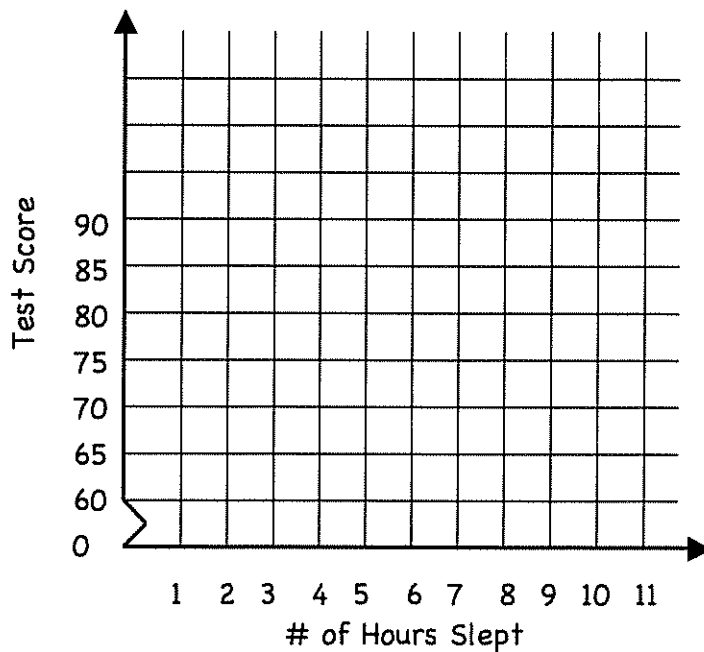
Practice with Scatter Plots

Classify the scatter plots as having a positive, negative, or no correlation.



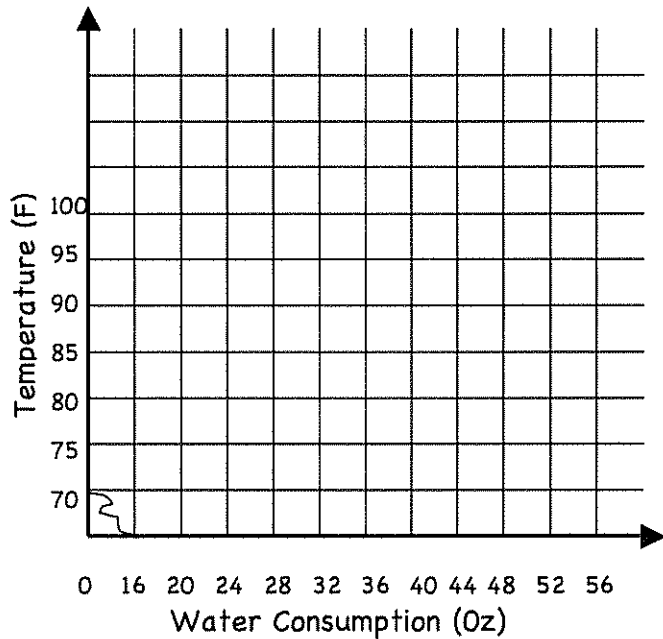
7. A history teacher asked her students how many hours of sleep they had the night before a test. The data below shows the number of hours the student slept and their score on the exam. Plot the data on a scatter plot.

Hours Slept	8	7	7	8	6	5	7	4	9	7
Test Score	83	86	74	88	76	63	90	60	89	81



8. Assume that during a three-hour period spent outside, a person recorded the temperature and their water consumption. The experiment was conducted on 7 randomly selected days during the summer. The data is shown in the table below.

Day	Temperature (F)	Water Consumption (oz)
1	99	48
2	85	27
3	97	48
4	75	16
5	92	32
6	85	25
7	83	20



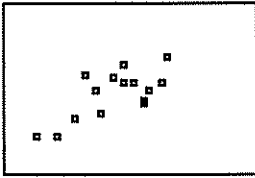
Create a scatter plot with the data. What is the correlation of this scatter plot? (Hint: Do not use the day on the scatter plot.)

Identify the data sets as having a positive, a negative, or no correlation.

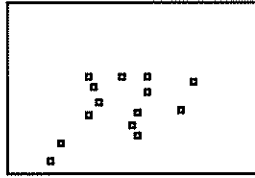
8. The number of hours a person has driven and the number of miles driven
9. The number of siblings a student has and the grade they have in math class
10. The age of a car and the value of the car
11. The number of weeks a CD has been out and the total sales
12. The number of years a person went to school and their income
13. The number of songs downloaded on your i-pod and the amount of memory available
14. The amount of time spent on the computer instant messaging your friends and the number of computers in your house
15. The age of a house and the number of people living in the house

Ch 6 Scatterplots, Association, and Correlation

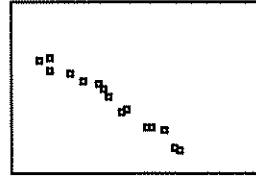
Class A



Class B



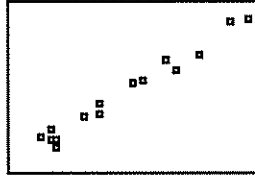
Class C



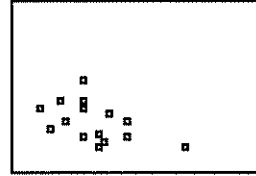
Class D



Class E



Class F



Consider the above scatterplots of hypothetical scores on the first and second exams of a course. The horizontal axis represents the first exam and the vertical axis represents the second exam. Each axis is formatted from 50 to 100 with a scale of 5.

- Describe the scatterplots above (direction, form, and strength), then fill in the table below with the appropriate letter of each graph

A:

B:

C:

D:

E:

F:

	Strong	Moderate	Weak
Negative			
Positive			

- For the pairs of variables below, indicate what you would expect for the direction (positive, negative, scattered) and the strength (none, weak, moderate, strong) of the association.

- Height and armspan
- Height and shoe size
- Height and GPA
- SAT score and college GPA
- Latitude and average January temperature of American cities
- Lifespan and weekly cigarette consumption
- Serving size and calories of fast food sandwiches
- Air fare and distance to destination

