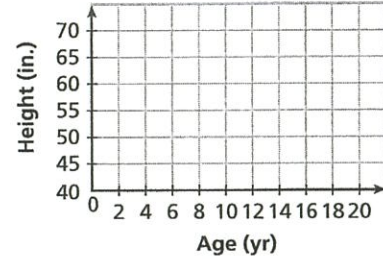


PRACTICE

Bob recorded his height at different ages.

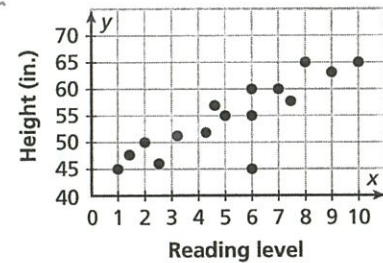
Age (years)	6	8	10	12	14
Height (inches)	45	50	55	61	63

1. Make a scatter plot of Bob's data.
2. Describe the type(s) of association between Bob's age and his height. Explain.



Ms. Banks recorded the height and reading level of several students.

3. Describe the type(s) of association between a student's height and his or her reading level. Explain.



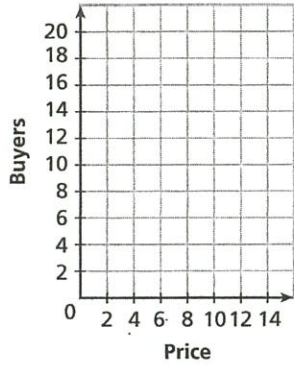
4. **Error Analysis** Ms. Banks concludes that an increase in reading level causes an increase in height. Explain whether you agree with her conclusion.

5. **Identify** an outlier to the graph. Then, explain why it is an outlier.

6 Susan surveyed 20 people about the price of a cleaning product she developed. She asked each person whether they would buy the cleaner at different prices. A person may answer yes or no to more than one price. Susan's results are shown in the table.

Price (\$)	Buyers
2	20
4	19
6	17
8	13
10	8
12	2

A Make a scatter plot of the data.

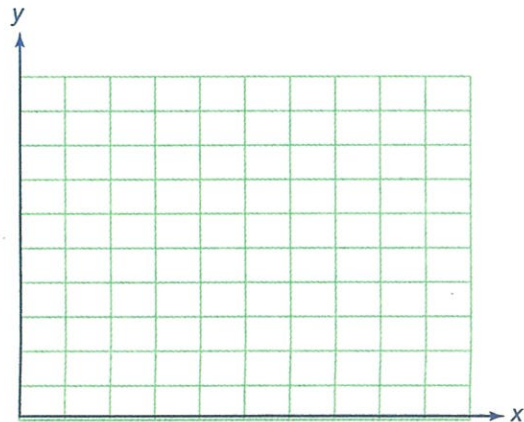


B Describe the type(s) of association you see between price and number of people who would buy at that price. Explain.

7 **CREATE** The table shows the numbers of minutes 10 shoppers spent in a supermarket and the total amount each spent during that shopping trip. On the grid below, create a scatter plot using the data in the table. Then describe the association shown, if any, in as many ways as possible. Identify any outlier(s).

Time and Total Spent

Time (in min)	Total (in USD)
10	\$20
30	\$80
50	\$120
20	\$40
60	\$150
30	\$60
40	\$90
70	\$180
60	\$20
50	\$140



Practice

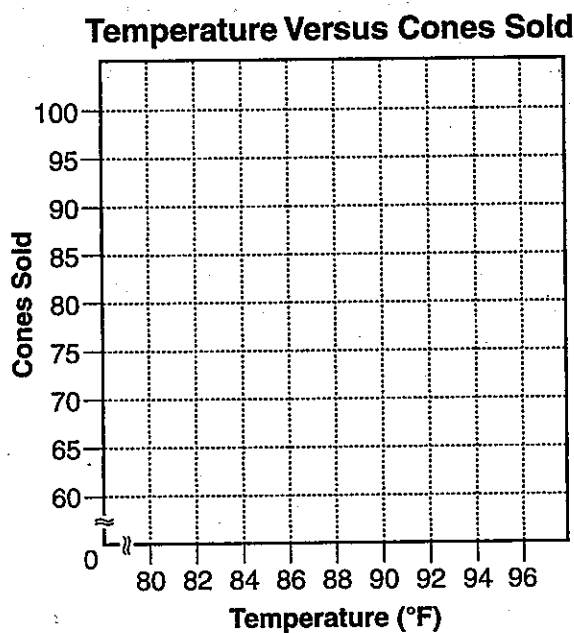
Directions: Use the following information to answer questions 1 through 4.

Christina works at the ice cream shop during summer vacation. She uses the following table to record the highest temperature each day for two weeks and the number of ice cream cones she sold on each of those days.

Temperature Versus Cones Sold

Temperature (°F)	85	87	91	95	88	83	80	82	88	90	93	85	87	83
Cones Sold	76	77	70	100	91	79	67	73	78	87	92	95	85	68

1. Use the information from the table to create a scatter plot of the data.



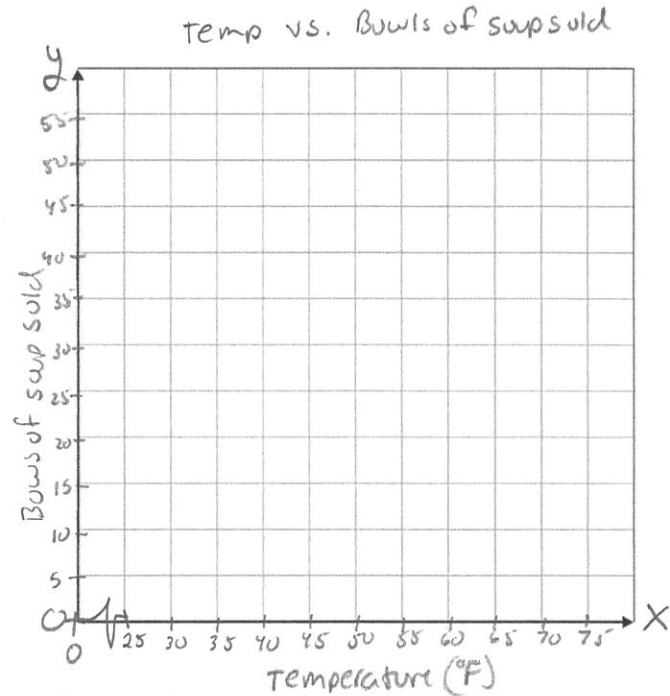
2. Does the scatter plot represent a clustering of data points? _____
3. Is there a relationship between the high temperature and the number of ice cream cones sold each day?

4. Are there any outliers in the data? If so, what are the ordered pairs of the point(s)?

1) The owner of a diner wanted to find out if outside temperature affects soup sales. Create a scatter plot from the table below.

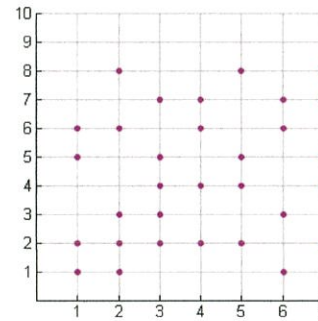
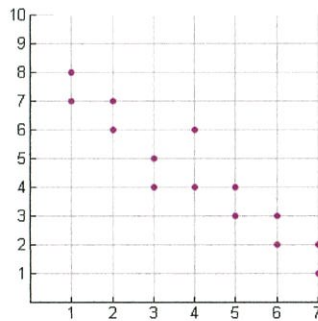
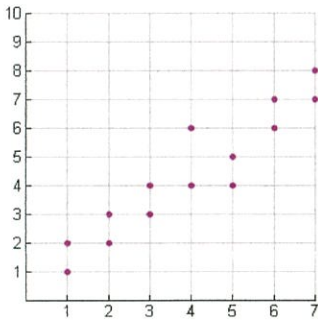


x	Temperature (in F)	30	32	35	40	40	45	54	60	64	68
y	Bowls of Soup Sold	8	50	42	42	38	28	22	15	16	5



- Plot the data points on the above coordinate grid.
- What conclusion can you make based on the graph?
- Are there any outliers?

2) For each scatterplot; tell whether the association (correlation) (relationship) is positive, negative, or no association.



3) The coaches of a group of debate teams answered a survey about hours of debate, team practice, and number of team wins. The graph shows the results of this survey.

The scatterplot indicates which of the following?

- Positive correlation
- Negative correlation
- No correlation
- A parallel correlation

