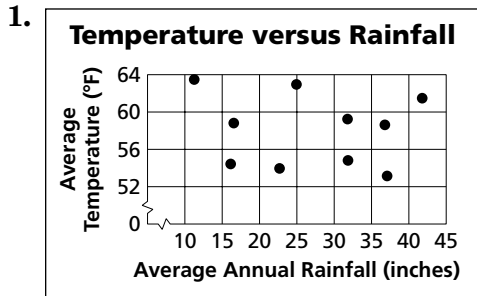


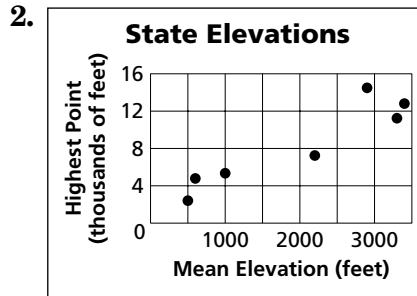
# 5-7 Practice

## Statistics: Scatter Plots and Lines of Fit

Determine whether each graph shows a *positive correlation*, a *negative correlation*, or *no correlation*. If there is a positive or negative correlation, describe its meaning in the situation.



Source: National Oceanic and Atmospheric Administration



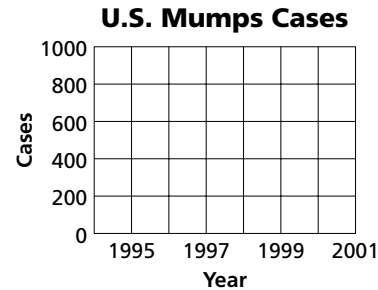
Source: U.S. Geological Survey

**DISEASE** For Exercises 3–6, use the table that shows the number of cases of mumps in the United States for the years 1995 to 1999.

U.S. Mumps Cases					
Year	1995	1996	1997	1998	1999
Cases	906	751	683	666	387

Source: Centers for Disease Control and Prevention

- Draw a scatter plot and determine what relationship, if any, exists in the data.
- Draw a line of fit for the scatter plot.
- Write the slope-intercept form of an equation for the line of fit.
- Predict the number of cases in 2004.



**ZOOS** For Exercises 7–10, use the table that shows the average and maximum longevity of various animals in captivity.

Longevity (years)								
Avg.	12	25	15	8	35	40	41	20
Max.	47	50	40	20	70	77	61	54

Source: Walker's Mammals of the World

- Draw a scatter plot and determine what relationship, if any, exists in the data.
- Draw a line of fit for the scatter plot.
- Write the slope-intercept form of an equation for the line of fit.
- Predict the maximum longevity for an animal with an average longevity of 33 years.

