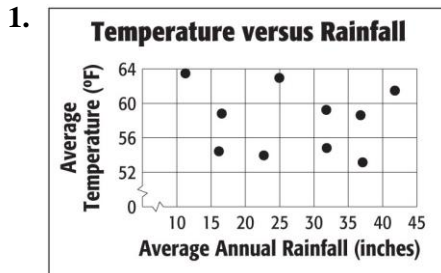


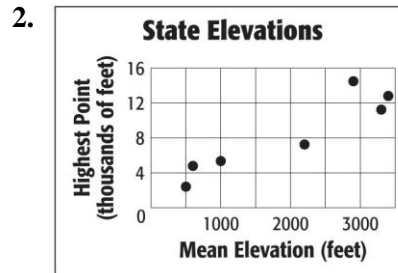
4-5 Practice

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

3. **DISEASE** The table shows the number of cases of Foodborne Botulism in the United States for the years 2001 to 2005.

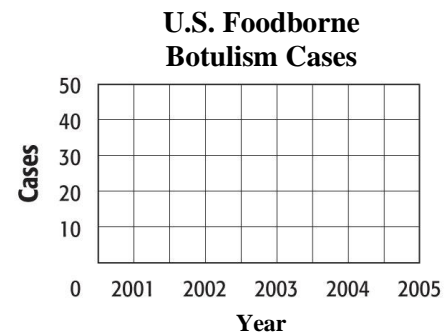
a. Draw a scatter plot and determine what relationship, if any, exists in the data.

U.S. Foodborne Botulism Cases					
Year	2001	2002	2003	2004	2005
Cases	39	28	20	16	18

Source: Centers for Disease Control

b. Draw a line of fit for the scatter plot.

c. Write the slope-intercept form of an equation for the line of fit.

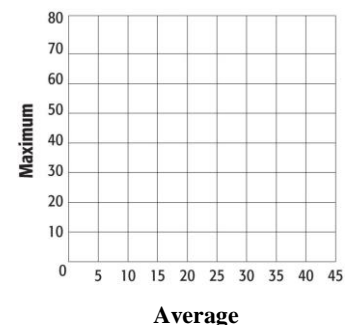


4. **ZOOS** The table shows the average and maximum longevity of various animals in captivity.

a. Draw a scatter plot and determine what relationship, if any, exists in the data.

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

Animal Longevity (Years)



b. Draw a line of fit for the scatter plot.

c. Write the slope-intercept form of an equation for the line of fit.

d. Predict the maximum longevity for an animal with an average longevity of 33 years.