**Source:** Walker’s Mammals of the World

**Animal Longevity (Years)**

5 10 15 20 25 30 35 40 45

**Average**

**Maximum**

**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.

**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.

**Source:** U.S. Geological Survey

**State Elevations**

16

12

8

4

0 1000 2000 3000

**Mean Elevation (feet)**

**Highest Point**

**(thousands of feet)**

**Temperature versus Rainfall**

64

60

56

52

0 10 15 20 25 30 35 40 45

**Average Annual Rainfall (inches)**

**Average**

**Temperature (ºF)**

**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.**

0 2001 2002 2003 2004

**Year**

**Cases**

**Source:** Centers for Disease Control

**U.S. Foodborne**

**Botulism Cases**

**Practice**

***Scatter Plots and Lines of Fit***

18

16

20

28

39

**Cases**

2005

2004

2003

2002

2001

**Year**

**U.S. Foodborne Botulism Cases**

54

61

77

70

20

40

50

47

**Max.**

20

41

40

35

8

15

25

12

**Avg.**

**Longevity (years)**

**Lesson 4-5**

*Glencoe Algebra 1*

Chapter 4

**33**

0

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

80

70

60

50

40

30

20

10

**a.** Draw a scatter plot and determine what

relationship, if any, exists in the data.

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

2005

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

line of fit.

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

50

40

30

20

10

**Source:** National Oceanic and Atmospheric

Administration

**2.**

**1.**

**4-5**

NAME DATE PERIOD



