Name _____ Date _____

7.3 Scatter Plots and Lines of Best Fit (continued)

2 ACTIVITY: Representing Data by a Linear Equation

Work with a partner. You are a biologist and are studying bat populations.

You are asked to predict the number of bats that will be living in an abandoned mine in 3 years.

To start, you find the number of bats that have been living in the mine during the past 8 years.

The table shows the results of your research.

7 years ago ↓ this year ↓

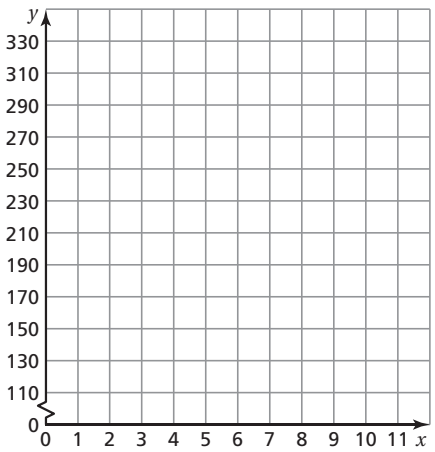
Year, *x*	0	1	2	3	4	5	6	7
Bats (thousands), *y*	327	306	299	270	254	232	215	197

Use the following steps to predict the number of bats that will be living in the mine after 3 years.

a. Graph the data in the table.

b. Draw the straight line that you think best approximates the points.

c. Write an equation of the line you drew.



d. Use the equation to predict the number of bats in 3 years.