Now

In Chapter 2, you will apply the big ideas listed below and reviewed in the Chapter Summary on page 140. You will also use the key vocabulary listed below.

Big Ideas

1. **Representing relations and functions**
2. **Graphing linear equations and inequalities in two variables**
3. **Writing linear equations and inequalities in two variables**

KEY VOCABULARY

- domain, range, *p. 72*
- function, *p. 73*
- linear function, *p. 75*
- slope, *p. 82*
- rate of change, *p. 85*
- parent function, *p. 89*
- *y*-intercept, *p. 89*
- slope-intercept form, *p. 90*
- *x*-intercept, *p. 91*
- point-slope form, *p. 98*
- direct variation, *p. 107*
- correlation coefficient, *p. 114*
- best-fitting line, *p. 114*
- absolute value function, *p. 123*
- transformation, *p. 123*
- linear inequality in two variables, *p. 132*

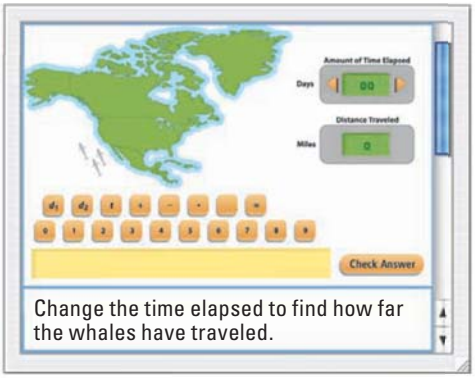
Why?

You can use rates of change to find linear models. For example, you can use an average rate of change to model distance traveled as a function of time.

Animated Algebra

The animation illustrated below for Exercise 44 on page 111 helps you answer this question: If a whale migrates at a given rate, how far will it travel in different periods of time?

Gray whales migrate from Mexico's Baja Peninsula to waters near Alaska.



Change the time elapsed to find how far the whales have traveled.

Animated Algebra at classzone.com

Other animations for Chapter 2: pages 73, 86, 90, 95, 98, 102, 107, 115, 133, and 140