

## Now

In Chapter 6, you will apply the big ideas listed below and reviewed in the Chapter Summary on page 414. You will also use the key vocabulary listed below.

## Big Ideas

- 1 Applying properties of inequality
- 2 Using statements with *and* or *or*
- 3 Graphing inequalities

### KEY VOCABULARY

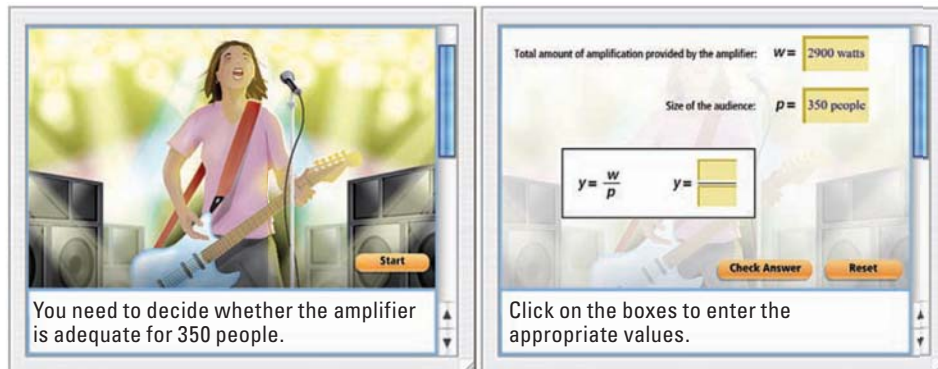
- graph of an inequality, p. 356
- compound inequality, p. 380
- linear inequality in two variables, p. 405
- equivalent inequalities, p. 357
- absolute value equation, p. 390
- graph of an inequality in two variables, p. 405
- absolute deviation, p. 392

## Why?

You can use inequalities to solve problems in sound amplification. For example, you can solve an inequality to determine whether an amplifier provides enough amplification for a given number of people in an audience.

## Animated Algebra

The animation illustrated below for Exercise 45 on page 387 helps you answer this question: Is a 2900 watt amplifier adequate for an audience of 350 people?



You need to decide whether the amplifier is adequate for 350 people.

Total amount of amplification provided by the amplifier:  $W = 2900$  watts

Size of the audience:  $p = 350$  people

$y = \frac{W}{p}$       $y =$

Click on the boxes to enter the appropriate values.

**Animated Algebra** at [classzone.com](http://classzone.com)

Other animations for Chapter 6: pages 358, 364, 382, 390, 391, 399, and 407