# **CHAPTER REVIEW**



- Multi-Language Glossary
- Vocabulary practice

## REVIEW KEY VOCABULARY

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

#### **VOCABULARY EXERCISES**

- **1.** Translate the verbal sentence into an absolute value equation: "The absolute deviation of *x* from 19 is 8."
- **2.** Identify three ordered pairs that are solutions of  $2x 3y \ge -10$ .
- **3. WRITING** When you graph a linear inequality in two variables, how do you know whether the boundary line is a solid line or a dashed line? How do you know which half-plane to shade?

## REVIEW EXAMPLES AND EXERCISES

Use the review examples and exercises below to check your understanding of the concepts you have learned in each lesson of Chapter 6.

## **Solve Inequalities Using Addition and Subtraction**

рр. 356–361

#### EXAMPLE

Solve  $x - 2.1 \le 1.4$ . Graph your solution.

$$x - 2.1 \le 1.4$$

Write original inequality.

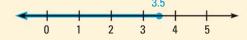
$$x - 2.1 + 2.1 \le 1.4 + 2.1$$

Add 2.1 to each side.

$$x \le 3.5$$

Simplify.

▶ The solutions are all real numbers less than or equal to 3.5.



#### **EXERCISES**

**EXAMPLES 1, 2, 3, and 4**on pp. 356–358
for Exs. 4–7

6.1

**4. GEOGRAPHY** The lowest elevation in Mexico is -10 meters at Laguna Salada. Write and graph an inequality that describes all elevations in Mexico that are greater than the lowest elevation.

Solve the inequality. Graph your solution.

**5.** 
$$x + 5 > -13$$

**6.** 
$$m-9 \ge -4$$

7. 
$$s + 3.7 < 1$$