

6

Solving and Graphing Linear Inequalities



A.7.B

6.1 Solve Inequalities Using Addition and Subtraction

A.7.B

6.2 Solve Inequalities Using Multiplication and Division

A.7.C

6.3 Solve Multi-Step Inequalities

A.7.A

6.4 Solve Compound Inequalities

A.7.B

6.5 Solve Absolute Value Equations

A.7.B

6.6 Solve Absolute Value Inequalities

A.7.A

6.7 Graph Linear Inequalities in Two Variables

Before

In previous chapters, you learned the following skills, which you'll use in Chapter 6: solving equations, graphing equations, and writing equations.

Prerequisite Skills

VOCABULARY CHECK

1. Identify one **ordered pair** that is a solution of $8x - 5y = -2$.
2. Are $7x - 4 = 10$ and $x = 3$ **equivalent equations**? *Explain.*
3. The **absolute value** of a number a is the distance between a and $\underline{\quad}$ on a number line.

SKILLS CHECK

Check whether the given number is a solution of the equation or inequality. (Review p. 21 for 6.1–6.6.)

4. $x - 2 = 3$; 5 5. $s + 3 = 12$; 9 6. $6y > 20$; 3 7. $\frac{p-3}{5} \leq 4$; 23

Solve the equation. Check your solution. (Review pp. 134, 141, 148 for 6.1–6.6.)

8. $m + 8 = -20$ 9. $-7x = 35$ 10. $-9r - 4 = 25$ 11. $4t - 7t = 9$

For the given value of a , find $-a$ and $|a|$. (Review p. 64 for 6.5–6.6.)

12. $a = -3$ 13. $a = -5.6$ 14. $a = 14$ 15. $a = 0$

Graph the equation. (Review p. 215 for 6.7.)

16. $y = -7x + 3$ 17. $6x + 3y = -5$ 18. $x = -8$ 19. $y = 4$



TEXAS

TAKE-HOME TUTOR Prerequisite skills practice at classzone.com

