6.2 EXERCISES

HOMEWORK

 WORKED-OUT SOLUTIONS on p. WS1 for Exs. 5, 9, and 39
TAKS PRACTICE AND REASONING Exs. 34, 41, 43, and 44
MULTIPLE REPRESENTATIONS Ex. 38

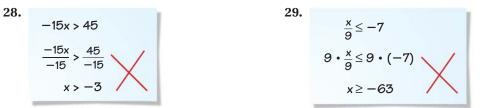
Skill Practice

- **1. VOCABULARY** Which property are you using when you solve $5x \ge 30$ by dividing each side by 5?
- **2.** WRITING Are $\frac{x}{-4} < -9$ and x < 36 equivalent inequalities? *Explain* your answer.
- **SOLVING INEQUALITIES** Solve the inequality. Graph your solution.

3. $2p \ge 14$ **4.** $\frac{x}{-3} < -10$ **5.** -6y < -36**6.** $40 > \frac{w}{5}$ **7.** $\frac{q}{4} < 7$ **8.** $72 \le 9r$ **9.** $\frac{g}{6} > -20$ **10.** $-11m \le -22$ **11.** $-90 \ge 4t$ **12.** $\frac{n}{3} < -9$ **13.** $60 \le -12s$ **14.** $\frac{v}{-4} \ge -8$ **15.** -8.4f > 2.1**16.** $\frac{d}{-2} \le 18.6$ **17.** 9.6 < -16c**18.** $0.07 \ge \frac{k}{7}$ **19.** $-1.5 \ge 6z$ **20.** $\frac{x}{-5} \le -7.5$ **21.** 1.02 < -3j**22.** $\frac{y}{-4.5} \ge -10$ **23.** $\frac{r}{-30} < 1.8$ **24.** $1.9 \le -5p$ **25.** $\frac{m}{0.6} > -40$ **26.** -2t > -1.22

27. WRITING How is solving *ax* > *b* where *a* > 0 similar to solving *ax* > *b* where *a* < 0? How is it different?

ERROR ANALYSIS Describe and correct the error in solving the inequality.



TRANSLATING SENTENCES In Exercises 30–33, write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

- **30.** The product of 8 and *x* is greater than 50.
- **31.** The product of -15 and *y* is less than or equal to 90.
- **32.** The quotient of v and -9 is less than -18.
- **33.** The quotient of *w* and 24 is greater than or equal to $-\frac{1}{6}$.
- **34. TAKS REASONING** Write an inequality in the form ax < b such that the solutions are all real numbers greater than 4.

EXAMPLES 1, 2, and 3 on pp. 363–364 for Exs. 3–29