Chapter

Cumulative Review

In Exercises 1-4, add or subtract.

2.
$$-1 + (-17)$$

3.
$$-5 - (-7)$$

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 3. $-5 - (-7)$ **4.** $20 + (-3)$

In Exercises 5-8, multiply or divide.

5.
$$-9(8)$$

6.
$$-19 \cdot (-2)$$
 7. $-42 \div 6$ **8.** $52 \div (-4)$

$$7.-42 \div 6$$

8.
$$52 \div (-4)$$

In Exercises 9 and 10, write and solve an equation to answer the auestion.

- 9. You and your friend chip in to buy a new gaming computer, which costs \$1024. How much do each of you pay for the new gaming computer?
- 10. It cost \$510 to get your car fixed. If it was \$375 for parts, how much did the mechanic charge for the work to fix your car?

In Exercises 11–16, solve the equation.

11.
$$5x - 10 = -10$$

12.
$$36 = 12u - 3u$$
 13. $11 = 1 - w$

13.
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14.
$$8 = \frac{c}{7} + 4$$

14.
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 15. $17x - 3 - 5x = 45$ **16.** $\frac{z + 5}{2} = 3$

16.
$$\frac{z+5}{2} =$$

In Exercises 17–20, simplify the expression.

17.
$$|-0.4 \cdot 7|$$
 18. $-|14|$ **19.** $|12|-|-12|$ **20.** $|-\frac{24}{-2}|$

20.
$$\left| -\frac{24}{-2} \right|$$

In Exercises 21-24, solve the equation.

21.
$$|x + 7| = 2$$
 22. $|d| = -2$ **23.** $-4|7x - 5| = 8$ $|2n - 10| - 6 = -4$

22.
$$|d| = -2$$

23.
$$-4|7x - 5| = 8$$

In Exercises 25–27, solve the literal equation for y.

25.
$$y - 3x = 9$$

26.
$$3x + y = 7$$

26.
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 27. $32x - 8y = 64$

In Exercises 28–31, write the sentence as an inequality.

- **28.** A number n is less than 4.
- **29.** A number y minus 8 is greater than or equal to 10.
- **30.** The number 21 is at least a number *t* times 3.
- **31.** Two-thirds of a number b is no more than 12.

In Exercises 32–34, solve the inequality. Graph the solution.

32.
$$b + 4 - 8 \ge 9$$

33.
$$28 - (-t) > -40 + 18$$

33.
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 34. $20 - 3z + 4z < 9 - 20$

In Exercises 35 and 36, write the sentence as an inequality. Then solve the inequality.

- **35.** A number plus 12 is no more than 8.
- **36.** The difference of 20 and a number is at least 15.

In Exercises 37–39, solve the inequality. Graph the solution.

37.
$$3u - 7 \le 14$$

38.
$$-11 \ge 13 - 6n$$

38.
$$-11 \ge 13 - 6n$$
 39. $7 + \frac{p}{3} < 2$

In Exercises 40-41, solve the inequality.

40.
$$3(g-5) > 3g$$

40.
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 41. $2(h-2) \le -2(1-h)$

In Exercises 42 and 43, write a compound inequality that is represented by the graph.

In Exercises 44-47, solve the inequality. Graph the solution.

45.
$$-50 < 7k + 6 < -8$$

44.
$$-1 < 9 + n < 17$$
 45. $-50 < 7k + 6 < -8$ **46.** $g + 5 \ge 12$ or $\frac{g}{9} < 0$

47.
$$2x < 10$$
 or $\frac{x}{2} \ge 3$

In Exercises 48-50, solve the inequality. Graph the solution, if possible.

48.
$$|2x - 8| < -10$$

48.
$$|2x - 8| < -10$$
 49. $|4w - 7| + 8 \ge 17$ **50.** $|10 + 4x| < 14$

50.
$$|10 + 4x| < 14$$