

# ARE YOU READY?

## Vocabulary

Match each term on the left with a definition on the right.

- |                         |                                                                           |
|-------------------------|---------------------------------------------------------------------------|
| 1. absolute value       | A. a letter used to represent a value that can change                     |
| 2. algebraic expression | B. the value generated for $y$                                            |
| 3. input                | C. a group of numbers, symbols, and variables with one or more operations |
| 4. output               | D. the distance of a number from zero on the number line                  |
| 5. $x$ -axis            | E. the horizontal number line in the coordinate plane                     |
|                         | F. a value substituted for $x$                                            |

## Ordered Pairs

Graph each point on the same coordinate plane.

- |               |                |               |               |
|---------------|----------------|---------------|---------------|
| 6. $(-2, 4)$  | 7. $(0, -5)$   | 8. $(1, -3)$  | 9. $(4, 2)$   |
| 10. $(3, -2)$ | 11. $(-1, -2)$ | 12. $(-1, 3)$ | 13. $(-4, 0)$ |

## Function Tables

Generate ordered pairs for each function for  $x = -2, -1, 0, 1, 2$ .

- |                            |                     |                     |
|----------------------------|---------------------|---------------------|
| 14. $y = -2x - 1$          | 15. $y = x + 1$     | 16. $y = -x^2$      |
| 17. $y = \frac{1}{2}x + 2$ | 18. $y = (x + 1)^2$ | 19. $y = (x - 1)^2$ |

## Solve Multi-Step Equations

Solve each equation. Check your answer.

- |                         |                    |                            |
|-------------------------|--------------------|----------------------------|
| 20. $17x - 15 = 12$     | 21. $-7 + 2t = 7$  | 22. $-6 = \frac{p}{3} + 9$ |
| 23. $5n - 10 = 35$      | 24. $3r - 14 = 7$  | 25. $9 = \frac{x}{2} + 1$  |
| 26. $-2.4 + 1.6g = 5.6$ | 27. $34 - 2x = 12$ | 28. $2(x + 5) = -8$        |

## Solve for a Variable

Solve each equation for the indicated variable.

- |                          |                           |                                       |
|--------------------------|---------------------------|---------------------------------------|
| 29. $A = \ell w$ for $w$ | 30. $V = \ell wh$ for $w$ | 31. $A = bh$ for $h$                  |
| 32. $C = 2\pi r$ for $r$ | 33. $I = Prt$ for $P$     | 34. $V = \frac{1}{3} \ell wh$ for $h$ |