

ARE YOU READY?

Vocabulary

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

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| 1. inequality | A. a pair of numbers (x, y) that represent the coordinates of a point |
| 2. linear equation | B. a statement that two quantities are not equal |
| 3. ordered pair | C. the y -value of the point at which the graph of an equation crosses the y -axis |
| 4. slope | D. a value of the variable that makes the equation true |
| 5. solution of an equation | E. the ratio of the vertical change to the horizontal change for a nonvertical line |
| | F. an equation whose graph is a straight line |

Graph Linear Functions

Graph each function.

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|---------------------------|-----------------------------|----------------|
| 6. $y = \frac{3}{4}x + 1$ | 7. $y = -3x + 5$ | 8. $y = x - 6$ |
| 9. $x + y = 4$ | 10. $y = -\frac{2}{3}x + 4$ | 11. $y = -5$ |

Solve Multi-Step Equations

Solve each equation.

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|--------------------|--------------------|------------------------------|
| 12. $-7x - 18 = 3$ | 13. $12 = -3n + 6$ | 14. $\frac{1}{2}d + 30 = 32$ |
| 15. $-2p + 9 = -3$ | 16. $33 = 5y + 8$ | 17. $-3 + 3x = 27$ |

Solve for a Variable

Solve each equation for y .

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| 18. $7x + y = 4$ | 19. $y + 2 = -4x$ | 20. $8 = x - y$ |
| 21. $x + 2 = y - 5$ | 22. $2y - 3 = 12x$ | 23. $y + \frac{3}{4}x = 4$ |

Evaluate Expressions

Evaluate each expression for the given value of the variable.

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| 24. $t - 5$ for $t = 7$ | 25. $9 - 2a$ for $a = 4$ | 26. $\frac{1}{2}x - 2$ for $x = 14$ |
| 27. $n + 15$ for $n = 37$ | 28. $9c + 4$ for $c = \frac{1}{3}$ | 29. $16 + 3d$ for $d = 5$ |

Solve and Graph Inequalities

Solve and graph each inequality.

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|--------------------|----------------|------------------|---------------------------|
| 30. $b - 9 \geq 1$ | 31. $-2x < 10$ | 32. $3y \leq -3$ | 33. $\frac{1}{3}y \leq 5$ |
|--------------------|----------------|------------------|---------------------------|