Tell whether the ordered pair is a solution of the equation.

1. \( y = 5x; (15, -3) \)
2. \( y = 4x + 9; (-2, 1) \)
3. \( 4x - 5y = 1; (4, 3) \)
4. \( 7y - 3x = 11; (5, 8) \)

Find the value of \( d \) when \( r \) has the given value in the equation.

5. \( d = 2.5r; r = 64 \)
6. \( d = 3r + 120; r = 62 \)
7. \( d - 5r = 40; r = 4 \)
8. \( 12r - d = -240; r = 9 \)

Graph the equation. Tell whether the equation is a function.

9. \( y = x - 3 \)
10. \( y = 2x + 4 \)
11. \( y = -\frac{3}{4}x \)
12. \( y = -\frac{1}{3}x + 2 \)
13. \( x = -11 \)
14. \( y = 8 \)
15. \( x = 8 \)
16. \( y = -1 \)
17. \( y = 2(x + 1) \)

Write the equation in function form. Then graph the equation.

18. \( 7x - y = 0 \)
19. \( 15x + y = 20 \)
20. \( y + 6x - 12 = 0 \)
21. \( 6y - 3x = 12 \)
22. \( 3x - 2y = 6 \)
23. \( 4x - 12y + 24 = 0 \)

24. The formula \( y = 2.205x \) converts a mass \( x \) in kilograms to a weight \( y \) in pounds. A sports car has a mass of 1270 kilograms. What is its weight in pounds?

25. A high school booster club sets up an academic scholarship that is awarded to one student each year. The formula \( y = 2700x \) can be used to find the total amount \( y \) of money awarded through this scholarship after \( x \) years. What is the total amount of scholarship money paid after 12 years?

Find the value of \( a \) that makes the ordered pair a solution of the equation.

26. \( y = 3x + 7; (-3, a) \)
27. \( y = 11 - 7x; (a, -10) \)
28. \( 2x + 4y = 14; (-5, a) \)
29. \( 9x - 5y = -9; (a - 1, 9) \)