

**Practice A**

For use with pages 209–215

**Decide which of the two points is a solution of the equation.**

- |                                       |   |   |
|---------------------------------------|---|---|
| 1. $x + y = 8$<br>a. (2, 4) b. (2, 6) | 2. $2x + y = 8$<br>a. (2, 2) b. (3, 2)  | 3. $y - x = 2$<br>a. (5, 3) b. (3, 5)   |
| 4. $x = 4$<br>a. (4, 2) b. (2, 4)     | 5. $y = -3$<br>a. (-3, 2) b. (3, -3)    | 6. $y = 0$<br>a. (0, 3) b. (-1, 0)      |
| 7. $y = x - 2$<br>a. (4, 6) b. (6, 4) | 8. $y = x + 3$<br>a. (-2, 1) b. (1, -2) | 9. $y = -3x + 1$<br>a. (0, 1) b. (1, 4) |

**Find three different ordered pairs that are solutions of the equation.**

- |                  |                   |                    |
|------------------|-------------------|--------------------|
| 10. $y = x - 5$  | 11. $x = -2$      | 12. $y = 1$        |
| 13. $y = -x + 4$ | 14. $y = -3x - 4$ | 15. $y = 2(x + 4)$ |

**Rewrite the equation in function form.**

- |                    |                     |                    |
|--------------------|---------------------|--------------------|
| 16. $-x + y = 6$   | 17. $x + y = -2$    | 18. $-x + y = -2$  |
| 19. $-2x + y = -4$ | 20. $3x - y = 1$    | 21. $-2x + y = 0$  |
| 22. $4x + 2y = 1$  | 23. $-9x + 3y = -6$ | 24. $-2x - 4y = 3$ |

**Use a table of values to graph the equation.**

- |                 |                            |                            |
|-----------------|----------------------------|----------------------------|
| 25. $y = x + 3$ | 26. $y = x - 2$            | 27. $y = 2x + 3$           |
| 28. $y = -x$    | 29. $y = \frac{2}{3}x + 6$ | 30. $y = \frac{1}{2}x + 4$ |
| 31. $y = 2 - x$ | 32. $y = 3(x + 1)$         | 33. $y = -2(x + 3)$        |

**Summer Income Use the following information.**

You earn \$15 an hour mowing lawns and \$10 an hour washing windows. You want to make \$400 in one week. An algebraic model for your earnings is  $15x + 10y = 400$ , where  $x$  is the number of hours mowing lawns and  $y$  is the number of hours washing windows.

34. What are your earnings for 3 hours of mowing and 5 hours of window washing?
35. Solve the equation for  $y$ .
36. Sketch a graph of the equation.

**Practice B**

For use with pages 209–215

**Decide which of the two points is a solution of the equation.**

1.  $2x + 4y = 8$

a. (2, 1)   b. (1, 2)

2.  $3x - y = 8$

a. (2, 2)   b. (3, 1)

3.  $4y - 3x = 7$

a. (3, 3)   b. (-1, 1)

4.  $y = 4$

a. (4, 2)   b. (2, 4)

5.  $x = -3$

a. (-3, 2)   b. (3, -3)

6.  $x = 0$

a. (0, 3)   b. (-1, 0)

7.  $y = 4x - 2$

a. (-1, -6)   b. (0, 2)

8.  $y = \frac{1}{2}x + 3$

a. (-2, 4)   b. (0, 3)

9.  $y = -3(x + 1)$

a. (-1, -6)   b. (-2, 3)

**Find three different ordered pairs that are solutions of the equation.**

10.  $y = 2x + 1$

11.  $x = 5$

12.  $y = -4$

13.  $y = 5 - 2x$

14.  $y = 3(2x + 4)$

15.  $y = -\frac{1}{2}x - 4$

**Rewrite the equation in function form.**

16.  $-2x + y = 6$

17.  $x + 4y = -2$

18.  $-x + y = 7$

19.  $-5x + 2y = -4$

20.  $3x - 5y = 1$

21.  $-2x - 4y = 0$

**Use a table of values to graph the equation.**

22.  $y = 2x + 1$

23.  $y = 3x - 2$

24.  $y = -4x + 2$

25.  $y = -x - 3$

26.  $y = \frac{1}{2}x + 3$

27.  $y = -\frac{1}{4}x + 1$

28.  $y = -(2 - x)$

29.  $y = -x + \frac{3}{2}$

30.  $y = -\frac{3}{4}x + \frac{1}{2}$

**Summer Income** Use the following information.

You earn \$15 an hour mowing lawns and \$10 an hour washing windows. You want to make \$400 in one week. An algebraic model for your earnings is  $15x + 10y = 400$ , where  $x$  is the number of hours mowing lawns and  $y$  is the number of hours washing windows.

31. Solve the equation for  $y$ .      32. Sketch a graph of the equation.
33. If you spent 14 hours mowing lawns one week, how many hours did you have to wash windows to earn \$400?

**Distance** Use the following information.

You are 455 miles from home and you are driving toward home at a constant rate of 65 miles per hour. The distance  $d$  (in miles) away from home after  $t$  hours is given by  $d = 455 - 65t$ .

34. Sketch the graph of the equation from  $t = 0$  to  $t = 7$ .
35. How far from home are you after 3 hours?