

EXERCISE 2.1

A. In exercises 1-15, determine whether or not the given ordered pair is a solution of the given equation.

1. $x + 3y = 5$; $(1, 2)$

4. $3x + 2y = 4$; $(2, 1)$

7. $3x - 2y = 12$; $\left(\frac{1}{3}, 5\right)$

10. $y = 4$; $(0, 4)$

13. $2x = 3y$; $\left(4, \frac{8}{3}\right)$

2. $2x + y = 4$; $\left(-\frac{1}{2}, 5\right)$

5. $2x + 5y + 10 = 0$; $(-5, 0)$

8. $2x - y = 4$; $(0, -4)$

11. $x + 3 = 0$; $(-3, 2)$

14. $3x = 4y$; $(4, 3)$

3. $2x - 5y = 7$; $(8.5, 2)$

6. $3x + y - 4 = 0$; $(2, 1)$

9. $x = 5$; $(7, 0)$

12. $x - 4 = 0$; $(4, 0)$

15. $y = 1$; $(2.9, 1)$

2 : Linear Equations and Modeling with Linear Functions

In exercises 16-29, complete the ordered pair so that it represents a solution for the given equation.

16. $(4, ?)$; $x - 3y = 2$

19. $(?, 0)$; $x - 2y = 1$

22. $(?, -4)$; $2x + 3y = 8$

25. $(?, 0)$; $2x - 7y = 4$

28. $(-2, ?)$; $2x + 7y = 10$

17. $(?, 2)$; $2x + y = 2$

20. $(?, 2)$; $x = 8$

23. $(?, 2)$; $3x - y = 4$

26. $(?, 0)$; $2x + 7y + 10 = 0$

29. $(?, -1)$; $x + 4y = 5$

18. $(-3, ?)$; $2x + y = 5$

21. $(0, ?)$; $y = 7$

24. $(0, ?)$; $3x + 5y = 10$

27. $(2, ?)$; $3x - y + 2 = 0$

B. In exercises 30-38, complete the table of values so that each ordered pair in the table represents a solution for the given equation.

30. $3x - 5y = 15$;

| x | y |
|---|---|
| 0 | — |
| — | 0 |
| 4 | — |
| — | 3 |

31. $2x + 3y = 6$;

| x | y |
|---|---|
| — | 0 |
| 0 | — |
| — | 4 |
| 6 | — |

32. $x - 2y = 3$;

| x | y |
|----|----|
| -1 | — |
| 3 | — |
| — | 2 |
| — | -1 |

33. $x + 2y = 2$;

| x | y |
|---|---|
| 0 | — |
| 2 | — |
| — | 4 |
| — | 3 |

34. $y + 3 = 4x$;

| x | y |
|----|---|
| -2 | — |
| 0 | — |
| 5 | — |

35. $y - 1 = 3x$;

| x | y |
|---|----|
| — | 4 |
| — | 13 |
| — | 16 |

36. $x = 5$;

| x | y |
|---|----|
| — | -3 |
| — | 4 |
| — | 7 |

37. $y = 4$;

| x | y |
|----|---|
| 3 | — |
| 2 | — |
| -1 | — |

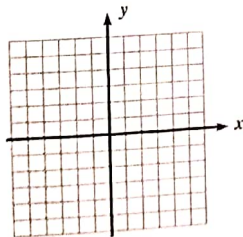
38. $y + 4 = 0$;

| x | y |
|----|---|
| 0 | — |
| -1 | — |
| 4 | — |

In exercises 39-58, complete the table of x -values and y -values for the given equation. Draw the graph of the equation by plotting these points.

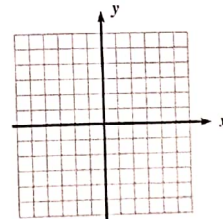
39. $x = 3$;

| x | y |
|---|---|
| — | 0 |
| — | 2 |
| — | 5 |



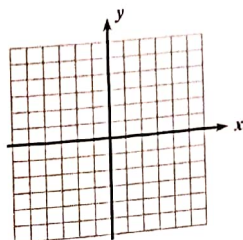
40. $x = 4$;

| x | y |
|---|---|
| — | 1 |
| — | 2 |
| — | 3 |



41. $y = 5$;

| x | y |
|----|---|
| -4 | — |
| 0 | — |
| 2 | — |



42. $y = 3$;

| x | y |
|---|---|
| — | 3 |
| — | 3 |
| — | 3 |

