

EXERCISES

Identify whether each ordered pair is a solution of $x + 2y = 6$.

1. (0, 3) 2. (2, 1) 3. (-2, 4) 4. (6, 0) 5. (-1, 3)

Identify whether each ordered pair of number is a solution of $2x - y = 3$.

6. (2, 1) 7. (3, 3) 8. (4, 2) 9. (-1, -5) 10. (-2, 5)

Identify whether each ordered pair of number is a solution of the equation.

11. $x + y = 3$, (1, 2) 12. $x - y = 3$, (3, 1) 13. $2x - 3y = 2$, (4, 2)
 14. $3x - 2y = 5$, (1, -1) 15. $5a - 2b = 5$, (2, 2) 16. $2m - 4n = 5$, ($\frac{1}{2}$, -1)
 17. $6s - t = 2$, ($\frac{1}{3}$, 1) 18. $3a + 4b = 3$, (-2, 3) 19. $x + 3y = 12$, (2, 3)
 20. $8x - y = -15$, ($-\frac{3}{4}$, 9) 21. $2x + y = 7$, (0, 5) 22. $2x + y = 7$, (0, 7)
 23. $2x - y = 7$, (0, -7) 24. $-2x - 3y = 1$, (1, -1) 25. $-2x + 3y = -5$, (1, -1)
 26. $y = 2x - 1$, (1, 1) 27. $y = 3x + 2$, (2, 9) 28. $y = \frac{1}{2}x - 5$, (4, -3)
 29. $y = \frac{2}{3}x$, (-6, -4) 30. $y = -\frac{2}{3}x + 1$, (-3, 3)

Write each of the linear equations in standard form.

31. $3x = y - 5$ 32. $y = -4x + 7$ 33. $3x = -4y + 6$ 34. $-4y = -5x - 9$
 35. $2x - 8 = -4y$ 36. $-3y + 20 = 5x$ 37. $-4x = 7y - 1$ 38. $-2x + 4y = 7$
 39. $-2x = -5y - 4$ 40. $4y - 6x = -5$

Find the values for y by substituting -2 , 0 , and 2 for x .

41. $y = 2x$ 42. $y = 2x + 1$ 43. $y = 2x - 1$ 44. $y = -2x + 1$
 45. $y = -2x - 1$ 46. $y = -x + 5$ 47. $y = -x - 5$ 48. $y = 4 - x$
 49. $y = 4 - 2x$ 50. $y = -4 + 2x$

51. The cost to buy a card is \$1.50. Write an equation which expresses the relationship between the total cost (c) and the number (n) of cards bought.
 52. A book regularly priced at p dollars is on sale at a 30% discount. Write an equation which expresses the relationship between the cost (c) of the book after the discount.
 53. The price of a suit is regularly at p dollars. The sales-tax rate is 7.5%. What is the equation of the cost (c) including tax?
 54. The cost to rent a car is \$20 per day plus 20 cents per mile. What is the equation of the cost (c) to rent the car for one day with a mileage (m)? What is the equation of the cost to rent the car for n days?
 55. A-Plus Company charges \$11.50 per copy of a book plus \$5 handling fee per order. Write an equation which expresses the relationship between the total charge (c) and the number (n) of books per order. What is the total charge if Barnes and Noble Bookstore places an order of 34 copies?