

1. $-9 + (-30) - 16 + 9$

Use the Distributive Property to rewrite each expression. Then simplify.

2. $16(3b - 0.25)$

a. $(3b - 0.25)16$; $48b - 4$

b. $16 \cdot 3b - 0.25$; $48b - 4$

c. $16 \cdot 3b - 16 \cdot 0.25$; $48b - 4$

d. $16 \cdot 3b - 16 \cdot 0.25$; $48b - 8$

3. $(5y - 3)7$

a. $7(5y - 3)$; $35y - 21$

b. $5y - 3 \cdot 7$; $5y - 21$

c. $5y \cdot 7 - 3 \cdot 7$; $35y - 21$

d. $5y \cdot 7 - 3 \cdot 7$; $2y - 21$

4. Find the average of the list of numbers

-15, 3, -8, 7, -9, 2, -1

5. Evaluate: $24 - [5 - (2 - 8)] + (4 - 6)^3$

6. Identify the property illustrated by the statement.

$$2x + 27 = 27 + 2x$$

7. Evaluate

$$\frac{14}{25} + \frac{2}{5}$$

8. $\frac{4}{7} + \frac{-2}{7}$

9. $\frac{5}{8} - \frac{2}{3}$

9. Evaluate

$$-\frac{5}{6}\left(-\frac{2}{5}\right)$$

10.

$$-10 \div \frac{3}{8}$$

11.

$$\frac{-16}{7} \div \left(-\frac{12}{35}\right)$$

12. Name the property illustrated by the statement.

$$5 + (21 + 17) = (5 + 21) + 17$$

13. A weather forecaster predicts that the temperature will drop 4 degrees each hour for the next 4 hours. If the temperature is 11 degrees before the temperature starts falling, what is the temperature after the drop?

14.

$$\frac{15}{3} - \frac{9^2}{9}$$

15. Evaluate $3x$ when $x = -4$

16. Evaluate $\frac{2x}{12}$ for $x = 24$

17. Evaluate $5x^2 + y$ for $x = 2$ and $y = -3$

18. Evaluate $-2(x + y)$ when $x = -1$ and $y = 4$

Write an expression for each sentence. Use a variable for the unknown value.

19. A number more than seven.

20. The product of a number and six.

21. Eight less than twice a number.

22. Brian is triple his nephew's age.

Solving equations

23. $x + 4 = 12$

24. $-3x = 15$

25. $\frac{y}{7} = 2$

26. $4x - 6 = 18$

27. $\frac{x}{6} - 1 = 2$

29. Betty wanted to use her tax refund to pay some bills and buy supplies for her parents' anniversary party. Her refund check was \$600 and she paid a \$75 cell phone bill, a \$250 car payment, and a \$110 credit card payment. How much does Betty have left over to buy party supplies?

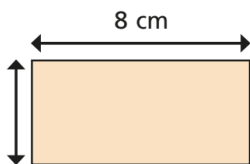
30. Glenn and his dad were planning a hike in Death Valley National Park. They planned to start their hike at 25 feet below sea level, have lunch at 9 feet below their start, and finish their hike at 15 feet above where they lunched. What will be the altitude at the end of their hike?

Area and Perimeter:

$$A = lw$$

$$P = 2l + 2w$$

31. If the area is 32cm^2 , find the width of the rectangle.



32. Using question 31, find the perimeter of the rectangle

33. Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

0

34. Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

π

35. Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

$\frac{2}{3}$

36. Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

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37. A gallon of milk costs \$3.95. A family drinks 2 gallons of milk a week. How much does the family spend on milk in a year?

38. Round the decimal to the nearest hundredth: 3.547

39. Round the decimal to the nearest tenth: 0.3474

40. Round the decimal to the nearest thousandth: -5.92465

Solve and graph each inequality.

41. $x - 4 < 10$



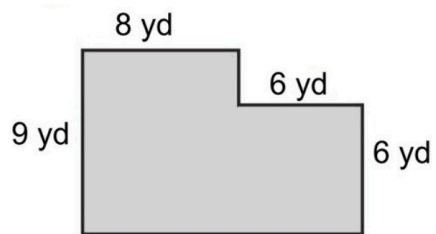
42. $x + 9 > 12$



43. $\frac{x}{4} \leq 8$



44. Find the perimeter of the composite shape.



45. Solve the equation by cross multiplication.

$$\frac{6}{2} = \frac{4}{x}$$

46. Solve the equation by cross multiplication.

$$\frac{y}{6} = \frac{10}{-3}$$

47. Express 30% as a fraction in simplest form

48. What is 25% of 32?

49. What is 110% of 54?

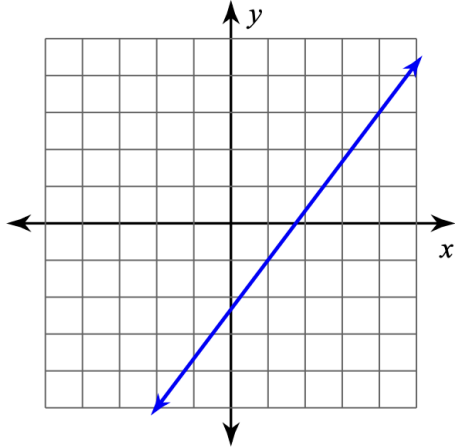
50. 67% of what number is 8? Round to the nearest whole.

51. Write the fraction in simplest form. $\frac{35}{25}$

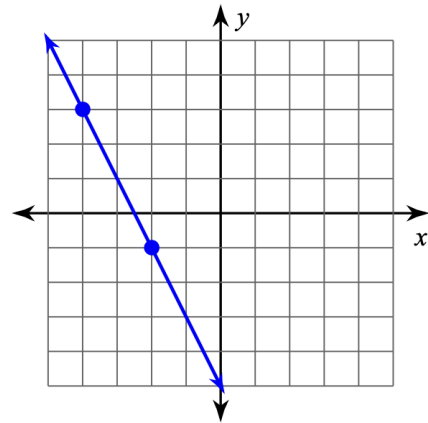
52. Write the fraction in simplest form. $\frac{108}{72}$

53. Which is greater, -3^2 or $(-3)^2$

54. Find the slope of the line graphed:



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56. Find the slope of the linear relationship between x and y :

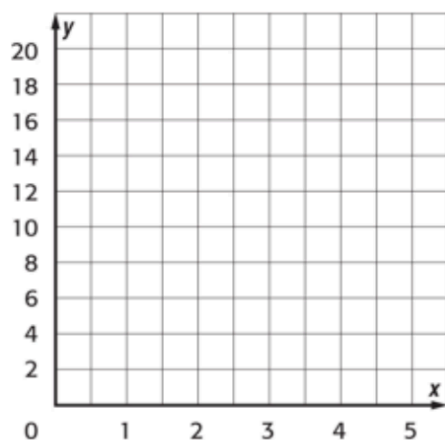
x (dollars in sales)	y (dollars in commissions)
\$30	\$3
\$50	\$5
\$80	\$8
\$90	\$9

57. Find the slope of the linear relationship between x and y :

x (minutes)	y (gallons)
2	30
3	45
5	60
6	90

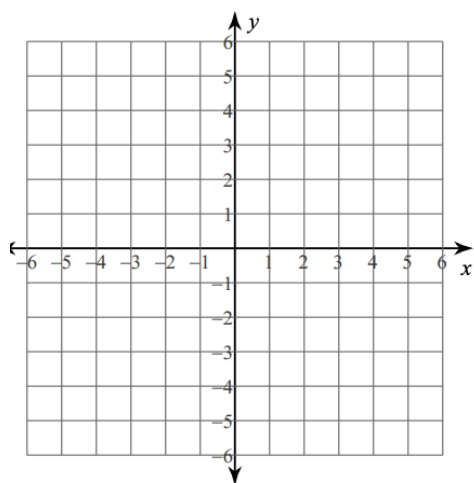
59. Graph the given information.

x(number of tennis balls sold)	3	4	5	6
y(total cost)	6	8	10	12



60. Graph the linear equation

$$y = \frac{1}{4}x + 2$$



61. Graph the linear equation.

$$y = \frac{5}{3}x$$

