

1. $-9 + (-30) - 16 + 9$ **-46**

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

2. $16(3b - 0.25)$ **C**
 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. $(5y - 3)7$ **C**
 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 **-3**
 $-15, 3, -8, 7, -9, 2, -1$

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

6. Identify the property illustrated by the statement. **Commutative**
 $2x + 27 = 27 + 2x$

7. Evaluate
 $\frac{14}{25} + \frac{2}{5}$

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

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

24/25

2/7

-1/24

9. Evaluate

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

1/3

10.

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

-80/3

11.

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

20/3

12. Name the property illustrated by the statement.

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

Associative

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?

-5 degrees

14.

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

-4

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

-12

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

4

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

17

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

-6

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

19. A number more than seven.

7+x

20. The product of a number and six.

6x

21. Eight less than twice a number.

2x-8

22. Brian is triple his nephew's age.

B = 3n

Solving equations

23. $x + 4 = 12$

$x = 8$

24. $-3x = 15$

$x = -5$

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

$y = 14$

26. $4x - 6 = 18$

$x = 6$

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

$x = 18$

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?

$\$165$

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?

$19 \text{ feet below sea level}$

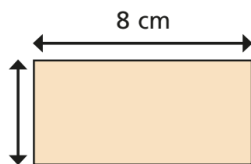
Area and Perimeter:

$$A = lw$$

$$P = 2l + 2w$$

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

$w = 4 \text{ cm}$



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

$P = 24$

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

0 whole

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

π irrational

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

$\frac{2}{3}$ rational

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

- 14 integer

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?

\$410.80

38. Round the decimal to the nearest hundredth: 3.547 3.56

39. Round the decimal to the nearest tenth: 0.3474 0.3

40. Round the decimal to the nearest thousandth: -5.92465 -5.925

Solve and graph each inequality.

41. $x - 4 < 10$



$x < 14$

$x - 4 < 10$

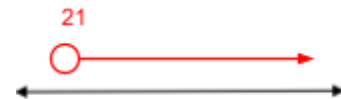


42. $x + 9 > 12$

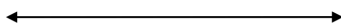


$x > 21$

$x + 9 > 12$



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

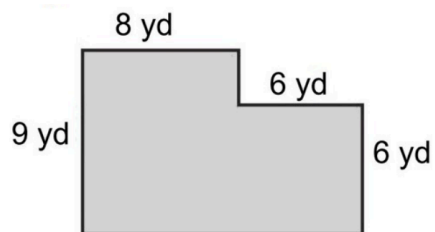


$x \leq 32$

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



44. Find the perimeter of the composite shape.



$P = 43 \text{ yds}$

45. Solve the equation by cross multiplication.

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

$$x = 4/3$$

46. Solve the equation by cross multiplication.

$$\frac{y}{6} = \frac{10}{-3} \quad y = -20$$

47. Express 30% as a fraction in simplest form $3/10$

48. What is 25% of 32? 8

49. What is 110% of 54? 59.4

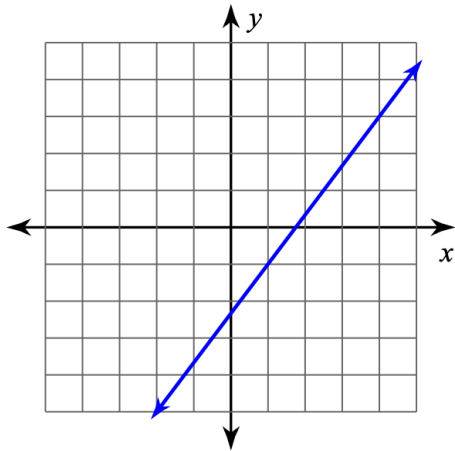
50. 67% of what number is 8? Round to the nearest whole. 12

51. Write the fraction in simplest form. $\frac{35}{25}$ $7/5$

52. Write the fraction in simplest form. $\frac{108}{72}$ $3/2$

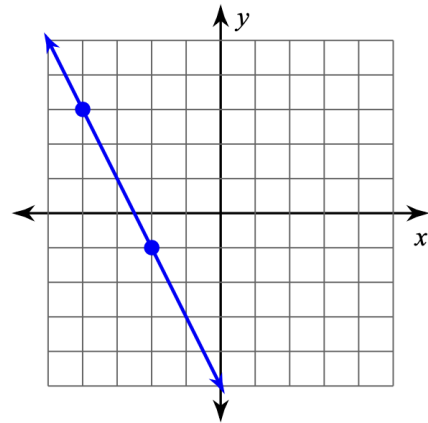
53. Which is greater, -3^2 or $(-3)^2$ $(-3)^2$

54. Find the slope of the line graphed:



$$m = 4/3$$

55. Find the slope of the line graphed:



$$m = -2$$

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

$$m = 1/5$$

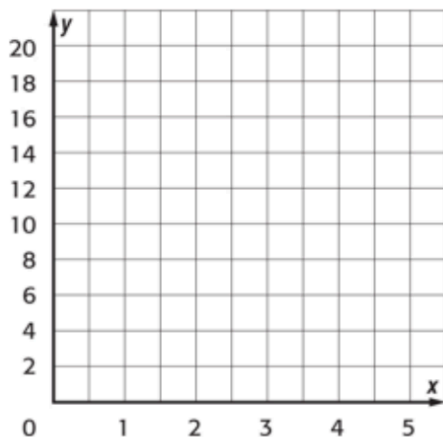
57. Find the slope of the linear relationship between x and y:

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

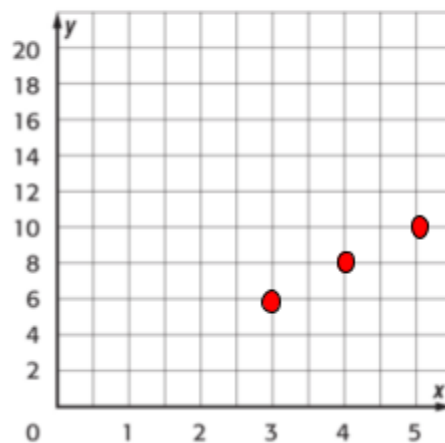
$$m = 15$$

59. Graph the given information.

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

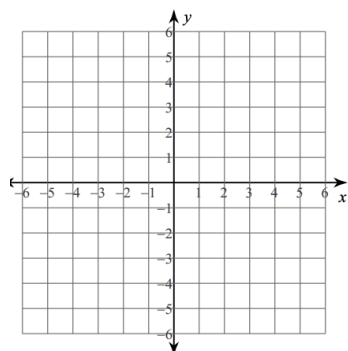


x(number of tennis balls sold)	3	4	5	6
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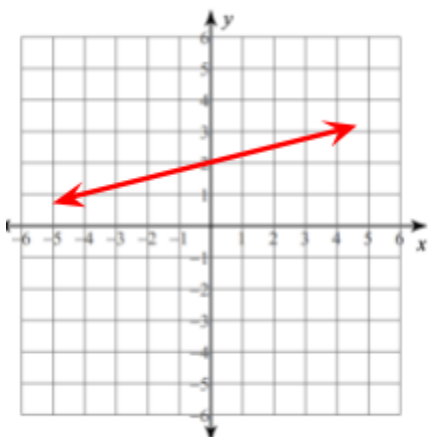


60. Graph the linear equation

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

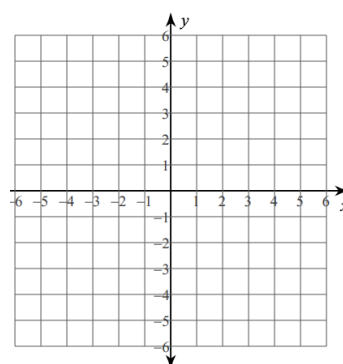


$$y = \frac{1}{4}x + 2$$



61. Graph the linear equation.

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



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

