1. Look at the two equations below. In one, 40 is a factor. In the other, 40 is a multiple. Fill in the missing words and numbers below to make true statements and identify which is which.

Note: there may be more than one right answer.

In $20 \times 2 = 40$, 40 is a **multiple** of $\mathbf{20}$ or $\mathbf{2}$.

In $2 \times 40 = 80$, 40 is a **factor** of $\mathbf{80}$.

2. Look at the two equations below. In one, 40 is a factor. In the other, 40 is a multiple. Fill in the missing words and numbers below to make true statements and identify which is which.

Note: there may be more than one right answer.

In $4 \times 40 = 160$, 40 is a **factor** of $\mathbf{160}$.

In $20 \times 2 = 40$, 40 is a **multiple** of $\mathbf{20}$ or $\mathbf{2}$.

3. Look at the two equations below. In one, 60 is a factor. In the other, 60 is a multiple. Fill in the missing words and numbers below to make true statements and identify which is which.

Note: there may be more than one right answer.

In $6 \times 60 = 360$, 60 is a **factor** of $\mathbf{360}$.

In $2 \times 30 = 60$, 60 is a **multiple** of $\mathbf{2}$ or $\mathbf{30}$.

4. Look at the two equations below. In one, 80 is a factor. In the other, 80 is a multiple. Fill in the missing words and numbers below to make true statements and identify which is which.

Note: there may be more than one right answer.

In $10 \times 8 = 80$, 80 is a **multiple** of $\mathbf{10}$ or $\mathbf{8}$.

In $2 \times 80 = 160$, 80 is a **factor** of $\mathbf{160}$.

5. Look at the two equations below. In one, 40 is a factor. In the other, 40 is a multiple. Fill in the missing words and numbers below to make true statements and identify which is which.

Note: there may be more than one right answer.

In $5 \times 40 = 200$, 40 is a **factor** of $\mathbf{200}$.

In $2 \times 20 = 40$, 40 is a **multiple** of $\mathbf{2}$ or $\mathbf{20}$.

6. What is the prime factorization of 234?

$$\boxed{2 \times 3 \times 3 \times 13 = 2 \times 3^2 \times 13}$$

7. What is the prime factorization of 12?

$$2 \times 2 \times 3 = 2^2 \times 3$$

8. What is the prime factorization of 176?

$$2 \times 2 \times 2 \times 2 \times 11 = 2^4 \times 11$$

9. What is the prime factorization of 37?

$$37$$

10. What is the prime factorization of 242?

$$2 \times 11 \times 11 = 2 \times 11^2$$

11. What is the greatest common factor of 45, 36, and 27?

$$9$$

12. What is the greatest common factor of 28 and 44?

$$4$$

13. What is the greatest common factor of 44, 42, and 2?

$$2$$

14. What is the greatest common factor of 9 and 33?

$$3$$

15. What is the greatest common factor of 4, 44, and 20?

$$4$$

16. What is the least common multiple of 4, 12, and 15?

60

17. What is the least common multiple of 3 and 9?

9

18. What is the least common multiple of 3, 9, and 15?

45

19. What is the least common multiple of 2, 5, and 10?

10

20. What is the least common multiple of 2 and 8?

8

21. Houa wants to take a train to Austin. There are two trains that go in that direction. There's a local train, which makes stops along the way and there's an express train, which doesn't make stops along the way. Houa got to the station just as two trains pulled away, one express and one local. If a local train runs every 3 hours and an express train runs every 8 hours, how much longer will it be until the next time two trains leave at the same time?

It will be 24 hours until the next time two trains leave at the same time.

22. A local radio station is giving away two sets of concert tickets. One set is for a concert at a big arena, and the other set is for special backstage passes for a performance at a smaller venue. For ten minutes, every 2nd caller will get tickets to the arena concert, and every 12th caller will get the backstage passes. Arianna is the first caller to win both sets of tickets. What caller number is she?

Arianna is caller number 12.

23. Aiden is throwing a party. He has 12 pencils and 3 fruit chews that he will use to create gift bags for party guests. Assume that Aiden wants to make as many gift bags as possible, sharing pencils and fruit chews equally among his friends. How many pencils would be in each gift bag?

There will be $\underline{4}$ pencils in each bag.

24. As a special promotion, a baseball team gives a certain number of baseball cards to every person entering the stadium. Over a five-minute period, 6 baseball cards are given out in total. Over the next five minutes, 3 baseball cards are given out in total. Assume each person receives the same number of cards. What is the greatest possible number of cards each person received?

The greatest possible number each person received is $\underline{3}$ cards.

25. In a medical lab, different testing machinery needs to be cleaned on different schedules. A machine that checks for antibodies needs to be cleaned every 7 tests. A machine that checks for white blood cells needs to be cleaned every 10 tests. Assume every sample needs to be tested for both antibodies and white blood cells. What is the least number of tests before both machines have to be cleaned?

There will be at least $\underline{70}$ tests before both machines need to be cleaned.

26. Solve for c. Express your answer in simplest radical form if necessary.

$$c = \sqrt[3]{-36} \cdot \sqrt[3]{-36} \cdot \sqrt[3]{-36}$$

$$\boxed{c = -36}$$

27. Solve for y. Express your answer in simplest radical form if necessary.

$$y^2 = 20$$

$$\boxed{\{y = 2\sqrt{5},\, y = -2\sqrt{5}\}}$$

28. Solve for d. Express your answer in simplest radical form if necessary.

$$d = (\sqrt{134.4})^2$$

$$\boxed{d = 134.4}$$

29. Solve for b. Express your answer in simplest radical form if necessary.

$$22 = b^2$$

$$\boxed{\{b = \sqrt{22},\ b = -\sqrt{22}\}}$$

30. Solve for d. Express your answer in simplest radical form if necessary.

$$d^3 = 50$$

$$\boxed{d = \sqrt[3]{50}}$$

31. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{8}$ $\boxed{-1}$ $\boxed{-20}$ $\boxed{-10}$ $\boxed{-6}$ $\boxed{6}$

$$\boxed{-20,\ -10,\ -6,\ -1,\ 6,\ 8}$$

32. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{-9}$ $\boxed{19}$ $\boxed{9}$ $\boxed{-20}$ $\boxed{-7}$ $\boxed{-13}$

$$\boxed{-20,\ -13,\ -9,\ -7,\ 9,\ 19}$$

33. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{-2}$ $\boxed{-7}$ $\boxed{-19}$ $\boxed{-17}$ $\boxed{-18}$ $\boxed{0}$

$$\boxed{-19,\ -18,\ -17,\ -7,\ -2,\ 0}$$

34. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{4}$ $\boxed{-11}$ $\boxed{-19}$ $\boxed{-9}$ $\boxed{-20}$ $\boxed{-6}$

$$\boxed{-20,\ -19,\ -11,\ -9,\ -6,\ 4}$$

35. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{-4}$ $\boxed{14}$ $\boxed{-17}$ $\boxed{-10}$ $\boxed{-20}$ $\boxed{18}$

$$\boxed{-20,\ -17,\ -10,\ -4,\ 14,\ 18}$$

36. Compute:

$$6 + (-12)$$

$$\boxed{-6}$$

37. Compute:

$$(-8) - (-10)$$

$$\boxed{2}$$

38. Compute:

$$10 + 6$$

$\boxed{16}$

39. Compute:

$$-4 - 3$$

$\boxed{-7}$

40. Compute:

$$-1 + (-2)$$

$\boxed{-3}$

41. Look at the expression below. Do not solve. State if the answer would be positive, negative, or zero, and explain why.

$$-20 \div -12$$

The answer would be positive because this is a division problem and both numbers are negative.

42. Look at the expression below. Do not solve. State if the answer would be positive, negative, or zero, and explain why.

$$-20 \times 14$$

The answer would be negative because this is a multiplication problem and
one number is positive and one number is negative.

43. Look at the expression below. Do not solve. State if the answer would be positive, negative, or zero, and explain why.

$$-7 \times -6$$

The answer would be positive because this is a multiplication problem and both numbers are negative.

44. Look at the expression below. Do not solve. State if the answer would be positive, negative, or zero, and explain why.

$$18 \times 0$$

The answer would be zero because this is a multiplication problem and anything times zero is zero.

45. Look at the expression below. Do not solve. State if the answer would be positive, negative, or zero, and explain why.

$$-13 \div -4$$

The answer would be positive because this is a division problem and both numbers are negative.

46. Evaluate.

$$-|194|$$

$$\boxed{-194}$$

47. Evaluate.

$$|-132|$$

$$\boxed{132}$$

48. Evaluate.

$$-|-35|$$

$$\boxed{-35}$$

49. Evaluate.

$$|39|$$

$$\boxed{39}$$

50. Evaluate.

$$-|-41|$$

$$\boxed{-41}$$

51. Evaluate the expression shown below and write your answer as a fraction or mixed number in simplest form.

$$\frac{\frac{1}{4}+\frac{1}{6}}{\frac{1}{8}}$$

$$\boxed{\frac{10}{3}}$$

52. Evaluate the expression shown below and write your answer as a fraction or mixed number in simplest form.

$$\left(\frac{5}{12}+\frac{1}{8}\right)\cdot\frac{1}{2}$$

$$\boxed{\frac{13}{48}}$$

53. Evaluate the expression shown below and write your answer as a fraction or mixed number in simplest form.

$$\frac{-\frac{2}{15}}{\frac{1}{6}}+\frac{11}{7}$$

$$\boxed{\frac{27}{35}}$$

54. Evaluate the expression shown below and write your answer as a fraction or mixed number in simplest form.

$$-\frac{1}{4}\div\frac{3}{32}\cdot-\frac{8}{9}$$

$$\boxed{\frac{64}{27}}$$

55. Evaluate the expression shown below and write your answer as a fraction or mixed number in simplest form.

$$\frac{\frac{5}{4}}{\frac{2}{7}+\frac{5}{14}}$$

$$\boxed{\frac{35}{18}}$$

56. Convert the fraction below to a decimal.

$$\frac{51}{100}$$

$\boxed{.51}$

57. Convert the fraction below to a decimal.

$$\frac{43}{50}$$

$\boxed{.86}$

58. Convert the decimal below to a fraction in simplest terms.

$$0.81$$

$\boxed{\frac{81}{100}}$

59. Convert the decimal below to a fraction in simplest terms.

$$0.94$$

$\boxed{\frac{47}{50}}$

60. Convert the fraction below to a decimal.

$$\frac{69}{100}$$

$\boxed{.69}$

61. Write the numbers below in order from least to greatest. Use commas to separate.

$\boxed{8.405}$ $\boxed{8\frac{4}{5}}$ $\boxed{8\frac{1}{2}}$ $\boxed{8.69}$ $\boxed{8.58}$

$\boxed{8.405, 8\frac{1}{2}, 8.58, 8.69, 8\frac{4}{5}}$

62. Write the numbers below in order from least to greatest. Use commas to separate.

$5\frac{1}{10}$ $5\frac{9}{10}$ 5.195 5.03 5.603

$$5.03, 5\frac{1}{10}, 5.195, 5.603, 5\frac{9}{10}$$

63. Write the numbers below in order from least to greatest. Use commas to separate.

$9\frac{1}{2}$ 9.964 9.399 9.22 $9\frac{3}{10}$

$$9.22, 9\frac{3}{10}, 9.399, 9\frac{1}{2}, 9.964$$

64. Write the numbers below in order from least to greatest. Use commas to separate.

1.25 1.86 1.412 $1\frac{1}{3}$ $1\frac{1}{2}$

$$1.25, 1\frac{1}{3}, 1.412, 1\frac{1}{2}, 1.86$$

65. Write the numbers below in order from least to greatest. Use commas to separate.

$5\frac{1}{2}$ 5.877 $5\frac{4}{5}$ 5.724 5.44

$$5.44, 5\frac{1}{2}, 5.724, 5\frac{4}{5}, 5.877$$

66. Select ALL numbers that round to 7.7 (when rounded to the nearest tenth).

- ☐ 7.754
- ☐ 7.77
- ☐ 7.629
- ✓ 7.651
- ✓ 7.682
- ✓ 7.715

67. Select ALL numbers that round to 5 (when rounded to the nearest whole number).

- ☐ 5.505
- ✓ 4.533
- ✓ 5.043
- ✓ 5.335
- ☐ 5.621
- ☐ 4.294

68. Select ALL numbers that round to 6.27 (when rounded to the nearest hundredth).

- ☐ 6.276
- ✓ 6.271
- ☐ 6.262
- ☐ 6.275
- ✓ 6.269
- ✓ 6.265

69. Select ALL numbers that round to 5.82 (when rounded to the nearest hundredth).

- ☐ 5.829
- ✓ 5.815
- ☐ 5.812
- ☐ 5.825
- ✓ 5.824
- ✓ 5.818

70. Select ALL numbers that round to 7.8 (when rounded to the nearest tenth).

- ☐ 7.898
- ☐ 7.734
- ✓ 7.794
- ☐ 7.85
- ✓ 7.756
- ☐ 7.878

71. Determine if $\sqrt{81}$ is rational or irrational and give a reason for your answer.

The number $\sqrt{81}$ is rational because it is the square root of a perfect square

72. Determine if $0.054227406110177\ldots$ is rational or irrational and give a reason for your answer.

The number $0.054227406110177\ldots$ is irrational because it is a decimal that does not repeat or terminate

73. Determine if $\sqrt{3}$ is rational or irrational and give a reason for your answer.

The number $\sqrt{3}$ is irrational because it is the square root of a non-perfect square

74. Determine if $0.27322370013414\ldots$ is rational or irrational and give a reason for your answer.

The number $0.27322370013414\ldots$ is irrational because it is a decimal that does not repeat or terminate

75. Determine if $0.9090090000900009000009\ldots$ is rational or irrational and give a reason for your answer.

The number $0.9090090000900009000009\ldots$ is irrational because it is a decimal that does not repeat or terminate

76. Find the sum of $4\sqrt{16}$ and $4\sqrt{4}$ in simplest form. Also, determine whether the result is rational or irrational and explain your answer.

$$4\sqrt{16}+4\sqrt{4}$$

$$24$$

The result of 24 is RATIONAL because it can be written as the ratio of two integers (24/1) and its decimal expansion TERMINATES (no infinite decimals).

77. Find the product of $\sqrt{5}$ and $5\sqrt{5}$ in simplest form. Also, determine whether the result is rational or irrational and explain your answer.

$$25$$

The result of 25 is RATIONAL because it can be written as the ratio of two integers (25/1) and its decimal expansion TERMINATES (no infinite decimals).

78. Find the sum of $4\sqrt{4}$ and $3\sqrt{10}$ in simplest form. Also, determine whether the result is rational or irrational and explain your answer.

$$4\sqrt{4} + 3\sqrt{10}$$

The result of $8 + 3\sqrt{10}$ is IRRATIONAL because it CANNOT be written as the ratio of two integers and its decimal expansion does NOT terminate or repeat:

$8 + 3\sqrt{10} = 17.486832980505138...$

79. Find the product of $2\sqrt{3}$ and $2\sqrt{19}$ in simplest form. Also, determine whether the result is rational or irrational and explain your answer.

The result of $4\sqrt{57}$ is IRRATIONAL because it CANNOT be written as the ratio of two integers and its decimal expansion does NOT terminate or repeat:

$4\sqrt{57} = 30.199337741083...$

80. Find the sum of $\sqrt{4}$ and $3\sqrt{9}$ in simplest form. Also, determine whether the result is rational or irrational and explain your answer.

$$\sqrt{4} + 3\sqrt{9}$$

$$11$$

The result of 11 is RATIONAL because it can be written as the ratio of two integers (11/1) and its decimal expansion TERMINATES (no infinite decimals).

81. Identify the constant term in the expression below.

$$6c + 5$$

$\boxed{5}$

82. Identify the coefficient in the expression below.

$$10 + 4c$$

$\boxed{4}$

83. Identify the variable in the expression below.

$$7y + 11$$

$\boxed{y}$

84. How many terms are written in the expression below?

$$5 + 9z - 7a$$

$\boxed{3}$

85. Identify the variable in the expression below.

$$7 + 2y$$

$\boxed{y}$

86. Write an expression for the sum of 39 and 29. Do not solve.

$\boxed{39 + 29}$

87. Write an expression for 36 take away 25. Do not solve.

$\boxed{36 - 25}$

88. Write a multiplication expression with factors of 13 and 4. Do not solve.

$\boxed{13 \times 4}$

89. Write an expression for the quotient of 28 and 4. Do not solve.

$\boxed{28 \div 4}$

90. Write an expression for 45 divided by 5. Do not solve.

$\boxed{45 \div 5}$

91. Which expression is equivalent to $4 + h + h$?

A. $4 + 2h$ B. $6h$ C. $4h$ D. $5 + h$

92. The width of a rectangle measures $(t + u)$ centimeters, and its length measures $(9t - 3u)$ centimeters. Which expression represents the perimeter, in centimeters, of the rectangle?

A. $20t - 4u$ B. $1 - 6u + 20t$

C. $10t - 2$ D. $20t - 4$

93. The width of a rectangle measures $(5w + 3)$ centimeters, and its length measures $(10w + 1)$ centimeters. Which expression represents the perimeter, in centimeters, of the rectangle?

A. $16w + 22$ B. $15w + 4$

C. $8w + 11$ D. $30w + 8$

94. Which expression is equivalent to $9u + 4 - 5u + 10$?

A. $14u - 6$ B. $4u + 14$

C. $13u + 5$ D. $4u - 6$

95. Which expression is equivalent to $k + 9k - 7k$?

A. $k + 2$ B. $-k$ C. $1 + 2k$ D. $3k$

96. Rewrite in simplest terms: $5(9n - 3) + 5n$

$50n - 15$

97. Rewrite in simplest terms: $5(2y - 7) + 2(7y + 5)$

$24y - 25$

98. Rewrite in simplest terms: $8t - 3(t - 10)$

$5t + 30$

99. Rewrite in simplest terms: $-6(3n - 4n + 9) - 3n$

$3n - 54$

100. Rewrite in simplest terms:

$6(-c+10d)+5d-2(-6d-4c)$

$\boxed{2c+77d}$

101. Which expression is equivalent to the expression below?

$$9(5r+3)-6r$$

A. $9(5r+3-6r)$ B. $20r+12$

C. $39r+27$ D. $51r+3$

102. Which expression is equivalent to the expression below?

$$r+r+r+r+r+r$$

A. r^6 B. 6 C. $\frac{r}{6}$ D. $6r$

103. Which expression is equivalent to the expression below?

$$5n+5p+n+n$$

A. $8n$ B. $3n+5p$

C. $7n+5p$ D. $12n$

104. Which expression is equivalent to the expression below?

$$8(3x)+6x$$

A. $30x$ B. $9x+8$

C. $24x+3x^2$ D. $17x$

105. Which pair of expressions below are equivalent?

A. $3(8g)$ and $11g$

B. $3(8g-7)$ and $24g-7$

C. $g+g+g+g$ and g^4

D. $3(8g)$ and $24g$

106. Fill in the parts-whole model for the following equation.

$$(-4x-15)-(x-6)=(\_\_\_\_)$$

$-4x-15$	
$x-6$	$-5x-9$

107. Fill in the parts-whole model for the following equation.

$$(-9x+17)-(\_\_\_\_)=-7x+10$$

$-9x+17$	
$-7x+10$	$\boxed{-2x+7}$

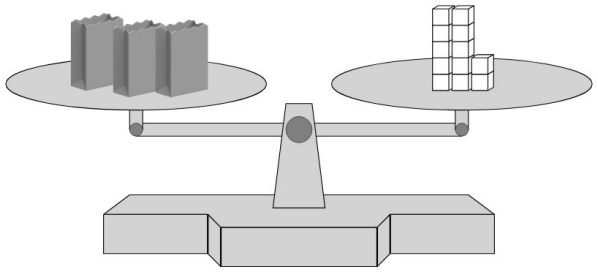
108. Fill in the parts-whole model for the following equation.

$$(6x+6)+(-1)=(\_\_\_\_)$$

$\boxed{6x+5}$	
$6x+6$	-1

109. The two-pan balance below holds some bags on one side and some blocks on the other. The bags are made out of paper so light it doesn't affect the balance. Each bag has the same number of blocks inside it. The two sides are balanced, or equal (in weight).

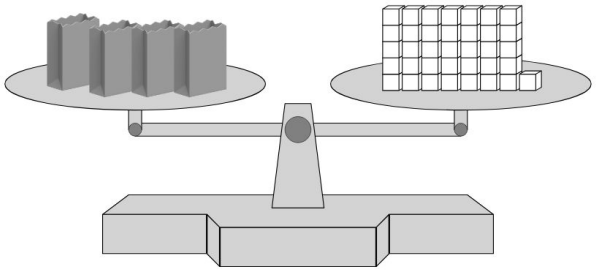
How many blocks are in each bag?



Each bag has $\underline{4}$ blocks in it.

110. The two-pan balance below holds some bags on one side and some blocks on the other. The bags are made out of paper so light it doesn't affect the balance. Each bag has the same number of blocks inside it. The two sides are balanced, or equal (in weight).

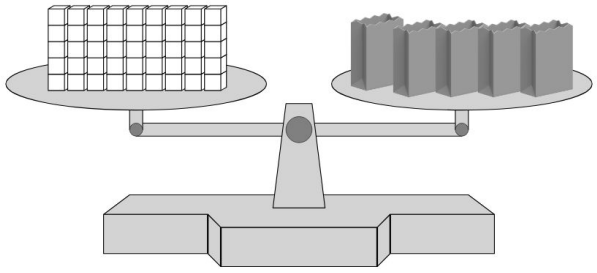
How many blocks are in each bag?



Each bag has $\underline{9}$ blocks in it.

111. The two-pan balance below holds some bags on one side and some blocks on the other. The bags are made out of paper so light it doesn't affect the balance. Each bag has the same number of blocks inside it. The two sides are balanced, or equal (in weight).

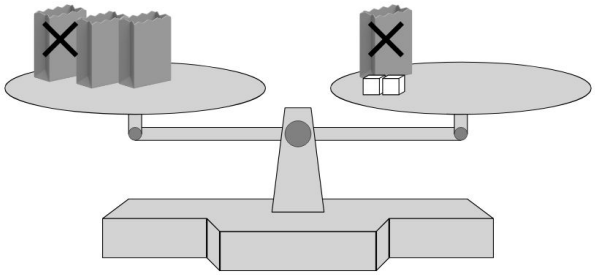
How many blocks are in each bag?



Each bag has $\underline{9}$ blocks in it.

112. The two-pan balance below holds 3 bags on the left side and 1 bag and 2 blocks on the right side. The bags are made out of paper so light it doesn't affect the balance. Each bag has the same number of blocks inside it. The two sides are balanced, or equal (in weight).

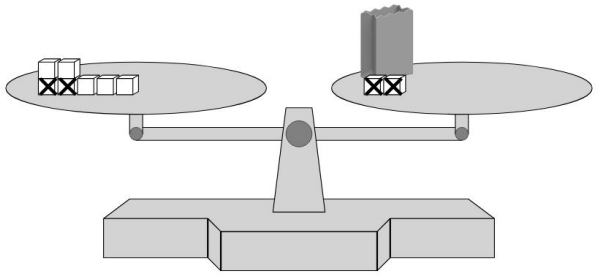
Cross out bags or blocks from either side of the balance until you get just bags on one side in balance with a certain number of blocks on the other side. Then use that to answer how many blocks are in each bag.



Each bag has $\underline{1}$ block in it.

113. The two-pan balance below holds 7 blocks on the left side and 1 bag and 2 blocks on the right side. The bag is made out of paper so light it doesn't affect the balance. Inside the bag is some number of blocks. The two sides are balanced, or equal (in weight).

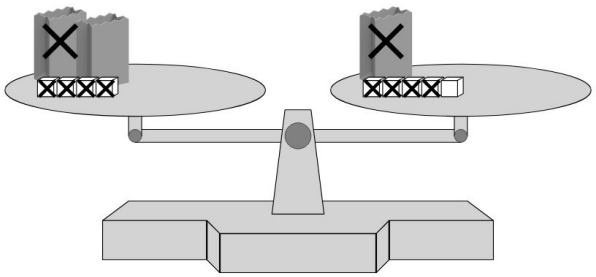
Cross out blocks from either side of the balance until you get a bag on one side in balance with a certain number of blocks on the other side. Then use that to answer how many blocks are in the bag.



The bag has $\underline{5}$ blocks in it.

114. The two-pan balance below holds 2 bags and 4 blocks on the left side and 1 bag and 5 blocks on the right side. The bags are made out of paper so light it doesn't affect the balance. Each bag has the same number of blocks inside it. The two sides are balanced, or equal (in weight).

Cross out bags or blocks from either side of the balance until you get a bag on one side in balance with a certain number of blocks on the other side. Then use that to answer how many blocks are in the bag.



Each bag has $\underline{1}$ block in it.

115. Find the value of x in the equation below.

$$24 = 3x$$

$\boxed{x = 8}$

116. Find the value of x in the equation below.

$$12 + x = 16$$

$\boxed{x = 4}$

117. Find the value of x in the equation below.

$$\frac{x}{7} = 5$$

$\boxed{x = 35}$

118. What value of x makes the equation below true?

$$5x - 2 = 48$$

$\boxed{\text{A. } 10}$ B. 18 C. 20 D. 48

119. Which equation has the solution $x = 5$?

$\boxed{\text{A. } 9x + 3 = 48}$ B. $2x - 2 = -8$

C. $2x + 6 = 34$ D. $5x + 3 = 46$

120. What value of z makes the equation below true?

$$5z - 1 = 34$$

A. 1 B. 5 $\boxed{\text{C. } 7}$ D. 34

121. At the park in Sofia's neighborhood there is a track. 8 laps around the track equal one mile. Fill in the table below, then write an equation to represent the relationship between miles and laps.

Miles	Laps
0	0
1	8
2	16
3	24
4	32

$l = 8m$

122. For a dodgeball tournament, each team must have 9 players. Fill in the table below, then write an equation to represent the relationship between teams and players.

Teams	Players
0	0
1	9
2	18
3	27
4	36

$p = 9t$

123. At the corner store, you can buy 1 granola bar for $\$5$. Fill in the table below, then write an equation to represent the relationship between granola bars and dollars.

Granola bars	Dollars
0	0
1	5
2	10
3	15
4	20

$d = 5g$

124. Write an equation for w in terms of a that corresponds to the table below.

a	w
16	4
20	5
24	6
28	7
32	8

$w = a \div 4$

125. Write an equation for t in terms of d that corresponds to the table below.

d	t
14	8
15	9
16	10
17	11
18	12

$t = d - 6$

126. Write an equation for y in terms of x that corresponds to the table below.

x	y
13	23
14	24
15	25
16	26
17	27

$y = x + 10$

127. Which equation for w in terms of d corresponds to the table below?

d	w
1	5
2	10
3	15
4	20
5	25

A. $w = 5d$

B. $w = 6d$

C. $w = 4d$

D. $w = d + 4$

128. Which equation for q in terms of d corresponds to the table below?

d	q
14	9
15	10
16	11
17	12
18	13

A. $q = d - 4$

B. $q = d \div 5$

C. $q = d - 5$

D. $q = d - 6$

129. Which equation for y in terms of x corresponds to the table below?

x	y
3	13
4	14
5	15
6	16
7	17

A. $y = x + 10$

B. $y = x + 11$

C. $y = x + 9$

D. $y = x + 13$

130. Solve for t.

$$2 = t + 5$$

$t = -3$

131. Solve for r.

$$3 = r - 9$$

$r = 12$

132. Solve for t.

$$-5 = 1 + t$$

$t = -6$

133. Solve for r.

$$-2 = -2r$$

$\boxed{r = 1}$

134. Solve for b.

$$3b = 18$$

$\boxed{b = 6}$

135. Solve for r.

$$-8r = 48$$

$\boxed{r = -6}$

136. Solve for y.

$$-10 = \frac{y}{9}$$

$\boxed{y = -90}$

137. Solve for s.

$$8 = \frac{s}{7}$$

$\boxed{s = 56}$

138. Solve for b.

$$-3 = \frac{b}{-6}$$

$\boxed{b = 18}$

139. What value of x is the solution to the equation below?

$$-8x = -24$$

$\boxed{x = 3}$

140. What value of x is the solution to the equation below?

$$-1 + x = 19$$

$\boxed{x = 20}$

141. What value of x is the solution to the equation below?

$$-9 = \frac{x}{-5}$$

$\boxed{x = 45}$

142. What value of x is the solution to the equation below?

$$18 = -2x$$

$\boxed{x = -9}$

143. What value of x is the solution to the equation below?

$$63 = -7x$$

$\boxed{x = -9}$

144. Solve for t and simplify your answer.

$$10 = -\frac{6}{5}t$$

$\boxed{t = -\frac{25}{3}}$

145. Solve for s and simplify your answer.

$$12 = \frac{2}{5}s$$

$$\boxed{s = 30}$$

146. Solve for n and simplify your answer.

$$\frac{4}{3}n = -14$$

$$\boxed{n = -\frac{21}{2}}$$

147. Solve for u and simplify your answer.

$$\frac{5}{2}u = -6$$

$$\boxed{u = -\frac{12}{5}}$$

148. Solve for a and simplify your answer.

$$\frac{4}{3}a = 18$$

$$\boxed{a = \frac{27}{2}}$$

149. Solve for c.

$$61 = -9c + 7$$

$$\boxed{c = -6}$$

150. Solve for c.

$$\frac{c}{7} - 31 = -29$$

$$\boxed{c = 14}$$

151. Solve for b.

$$14 - \frac{b}{8} = 17$$

$$\boxed{b = -24}$$

152. Solve for z.

$$57 = -10z + 7$$

$$\boxed{z = -5}$$

153. Solve for y.

$$\frac{y}{5} - 34 = -22$$

$$\boxed{y = 60}$$

154. Solve for a.

$$\frac{2}{7}a + 24 = 28$$

$\boxed{a = 14}$

155. Solve for a.

$$15 + \frac{1}{12}a = 23$$

$\boxed{a = 96}$

156. Solve for z.

$$2 + \frac{4}{9}z = 30$$

$\boxed{z = 63}$

157. Solve for a.

$$3 = -\frac{1}{8}a - 3$$

$\boxed{a = -48}$

158. Solve for b.

$$\frac{2}{9}b + 24 = 32$$

$\boxed{b = 36}$

159. Solve. $2(4x - 2) = -52$

$\boxed{x = -6}$

160. Solve. $3(x + 7) = -6$

$\boxed{x = -9}$

161. Solve. $4(y - 1) = 0$

$\boxed{y = 1}$

162. Solve for x in simplest form.

$$1 = \frac{1}{7}(3x + 35)$$

$$\boxed{x = -\frac{28}{3}}$$

163. Solve for x in simplest form.

$$12 = \frac{8}{5}(x + 10)$$

$$\boxed{x = -\frac{5}{2}}$$

164. Solve for x in simplest form.

$$11 = \frac{1}{2}(x - 4)$$

$$\boxed{x = 26}$$

165. Solve for x in simplest form.

$$4 = \frac{2}{5}(3x + 5)$$

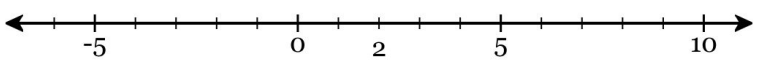
$$\boxed{x = \frac{5}{3}}$$

166. Solve for x in simplest form.

$$4 = \frac{1}{7}(9x + 21)$$

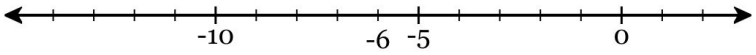
$$\boxed{x = \frac{7}{9}}$$

167. Select the values that make the inequality $n \leq 2$ true. (Numbers written in order from least to greatest going across.)



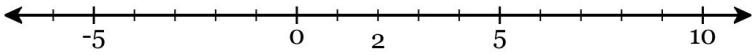
☑ **-6**	☑ **-3**	☑ **-1**
☑ **1**	☑ **1.9**	☑ **1.99**
☑ **1.999**	☑ **2**	☐ 2.001
☐ 2.01	☐ 2.1	☐ 3
☐ 5	☐ 7	☐ 10

168. Select the values that make the inequality $u < -6$ true. (Numbers written in order from least to greatest going across.)



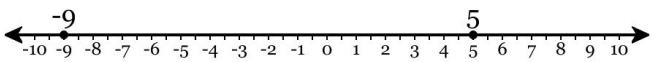
☑ **-14**	☑ **-11**	☑ **-9**
☑ **-7**	☑ **-6.1**	☑ **-6.01**
☑ **-6.001**	☐ -6	☐ -5.999
☐ -5.99	☐ -5.9	☐ -5
☐ -3	☐ -1	☐ 2

169. Select the values that make the inequality $h \geq 2$ true. (Numbers written in order from least to greatest going across.)



☐ -6	☐ -3	☐ -1
☐ 1	☐ 1.9	☐ 1.99
☐ 1.999	☑ **2**	☑ **2.001**
☑ **2.01**	☑ **2.1**	☑ **3**
☑ **5**	☑ **7**	☑ **10**

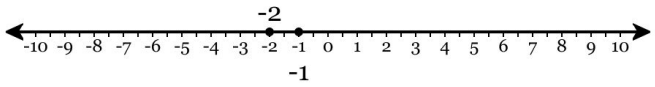
170. Plot -9 and 5 on the number line below.



-9 < 5

-9 is less than 5 because it is further to the left on the number line.

171. Plot -2 and -1 on the number line below.



-2 < -1

-2 is less than -1 because it is further to the left on the number line.

172. Plot -2½ and -2 on the number line below.

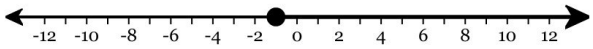
-2½ < -2

-2½ is less than -2 because it is further to the left on the number line.

173. Solve for x and graph the solution on the number line below.

$$3 \geq -3x$$

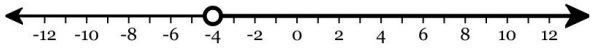
$$-1 \leq x$$



174. Solve for x and graph the solution on the number line below.

$$-12 < 3x$$

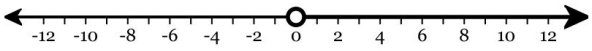
$$-4 < x$$



175. Solve for x and graph the solution on the number line below.

$$0 < \frac{x}{2}$$

$$0 < x$$



176. Which of the following values are solutions to the inequality $3x + 2 > -3$?

I. 0 II. -8 III. -9

A. None B. I only

C. II only D. III only

E. I and II F. I and III

G. II and III H. I, II and III

177. Which of the following values are solutions to the inequality $2x - 8 < 2$?

I. 3 II. 6 III. 5

A. None B. I only

C. II only D. III only

E. I and II F. I and III

G. II and III H. I, II and III

178. Which of the following values are solutions to the inequality $1 \leq 2x - 4$?

I. -5 II. -1 III. 7

A. None B. I only

C. II only D. III only

E. I and II F. I and III

G. II and III H. I, II and III

179. Which inequality is true when the value of k is -3?

A. $-k + 7 \leq 1$ B. $k + 7 \geq -1$

C. $-k + 7 \leq -1$ D. $k + 7 \leq -1$

180. Which inequality is true when the value of c is 9?

A. $-c + 6 < -5$ B. $c + 6 < 5$

C. $-c + 6 > -5$ D. $-c + 6 > 5$

181. Which inequality is true when the value of r is -11?

A. $-r - 1 \leq 2$ B. $-r - 1 \leq -2$

C. $r - 1 \geq -2$ D. $-r - 1 \geq 2$

182. Solve the inequality and graph the solution on the line provided.

$$2x + 5 \geq -5$$

$x \geq -5$

183. Solve the inequality and graph the solution on the line provided.

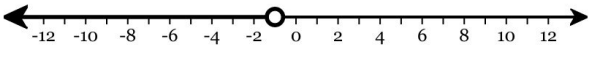
$$7x - 12 > 44$$

$x > 8$

184. Solve the inequality and graph the solution on the line provided.

$$11 + 8x < 3$$

$x < -1$



185. Dominic needs to order some new supplies for the restaurant where he works. The restaurant needs at least 412 glasses. There are currently 304 glasses. If each set on sale contains 18 glasses, which inequality can be used to determine x, the minimum number of sets of glasses Dominic should buy?

A. $412 \geq 18x + 304$

B. $412 \leq 18 + 304x$

C. $412 \leq 18x + 304$

D. $412 \geq 18 + 304x$

186. A shipping container will be used to transport several 100-kilogram crates across the country by rail. The greatest weight that can be loaded into the container is 25500 kilograms. Other shipments weighing 11600 kilograms have already been loaded into the container. Which inequality can be used to determine x, the greatest number of 100-kilogram crates that can be loaded onto the shipping container?

A. $25500 \leq 100x + 11600$

B. $100(11600 + x) \leq 25500$

C. $100(11600 + x) \geq 25500$

D. $25500 \geq 100x + 11600$

187. A rental car company charges \$79.18 per day to rent a car and \$0.12 for every mile driven. Mohal wants to rent a car, knowing that:

- He plans to drive 150 miles.
- He has at most \$90 to spend.

Which inequality can be used to determine d, the maximum number of days Mohal can afford to rent for while staying within his budget?

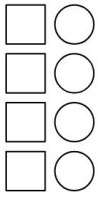
A. $90 \geq 79.18d + 18$

B. $90 \leq 79.18(18 + d)$

C. $90 \geq 79.18(18 + d)$

D. $90 \leq 79.18d + 18$

188. Find the ratio of squares to circles in the diagram below.



Ratio of squares to circles (without simplifying):

$\square : \square$

For every 1 square there are $\underline{1}$ circles, therefore the simplified ratio of squares to circles is $\underline{1} : \underline{1}$.

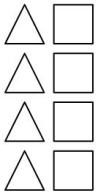
189. Find the ratio of squares to circles in the diagram below.

Ratio of squares to circles (without simplifying):

$\square : \square$

For every 1 square there are $\underline{1}$ circles, therefore the simplified ratio of squares to circles is $\underline{1} : \underline{1}$.

190. Find the ratio of triangles to squares in the diagram below.

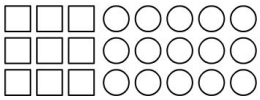


Ratio of triangles to squares (without simplifying):

$\square : \square$

For every 1 triangle there are $\underline{1}$ squares, therefore the simplified ratio of triangles to squares is $\underline{1} : \underline{1}$.

191. Find the ratio of squares to circles in the diagram below.



Ratio of squares to circles (without simplifying):

$\square : \square$

For every 3 squares there are $\underline{5}$ circles, therefore the simplified ratio of squares to circles is $\underline{3} : \underline{5}$.

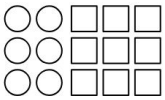
192. Find the ratio of triangles to total shapes in the diagram below.

Ratio of triangles to total shapes (without simplifying):

$\square : \square$

For every 3 triangles there are $\underline{8}$ total shapes, therefore the simplified ratio of triangles to total shapes is $\underline{3} : \underline{8}$.

193. Find the ratio of circles to total shapes in the diagram below.



Ratio of circles to total shapes (without simplifying):

$\square : \square$

For every 2 circles there are 5 total shapes, therefore the simplified ratio of circles to total shapes is $2 : 5$.

194. Find an equivalent ratio in simplest terms: $40 : 18$

$20 : 9$

195. Find an equivalent ratio in simplest terms: $40 : 90$

$4 : 9$

196. Find an equivalent ratio in simplest terms: $40 : 64$

$5 : 8$

197. Choose **all** the ratios below that are equivalent to $6 : 16$.

- ☐ **16:6**
- ☑ **12:32**
- ☐ **5:15**
- ☑ **3:8**
- ☑ **18:48**

198. Choose **all** the ratios below that are equivalent to $6 : 7$.

- ☑ **24:28**
- ☑ **18:21**
- ☑ **30:35**
- ☐ **5:6**
- ☑ **36:42**

199. Choose **all** the ratios below that are equivalent to $30 : 18$.

- [x] **90:54**
- [ ] **36:60**
- [ ] **31:19**
- [x] **5:3**
- [ ] **32:20**

200. Morgan and Montraie are making fruit salads for a picnic. Morgan mixes 5 cups of melon and 6 cups of apple and Montraie mixes 1 cup of melon and 6 cups of apple. Whose fruit salad will taste more melony?

A. Morgan's fruit salad will be more melony.

B. Montraie's fruit salad will be more melony.

C. The two fruit salads will be equally melony.

201. Students are making lemonade from a powdered lemon drink mix. Arianna mixes 2 cups of water and 1 teaspoon of powdered lemon mix. Angel mixes 2 cups of water and 3 teaspoons of powdered lemon mix. Whose mix will be more watery?

A. Arianna's mix will be more watery.

B. Angel's mix will be more watery.

C. The two mixes will be equally watery.

202. In art class students are mixing black and white paint to make gray paint. Marques mixes 4 cups of black paint and 3 cups of white paint. Chloe mixes 5 cups of black paint and 3 cups of white paint. Whose gray paint will be lighter?

A. Marques's gray paint will be lighter.

B. Chloe's gray paint will be lighter.

C. The two gray paints will be equally light.

203. There are 20 lollipops and 40 candy bars for a gift bag $(20 : 40$ ratio$)$. Find two simplified ratios.

All possible answers:

$10:20, 5:10, 4:8, 2:4, 1:2.$

204. There are 42 dogs and 12 cats at a pet daycare $(42 : 12 \text{ ratio})$. Find two simplified ratios.

All possible answers:

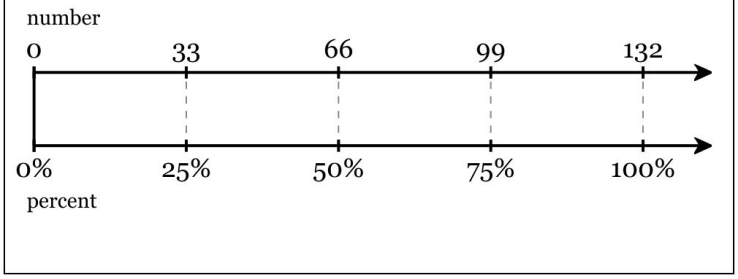
$21:6, 14:4, 7:2.$

205. There are 24 apples and 12 bananas for a fruit basket $(24 : 12 \text{ ratio})$. Find two simplified ratios.

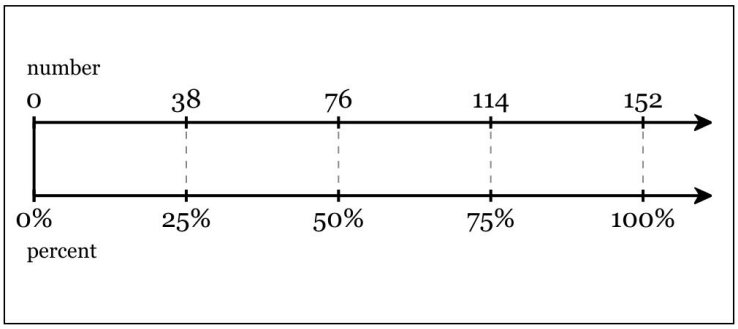
All possible answers:

$12:6, 8:4, 6:3, 4:2, 2:1.$

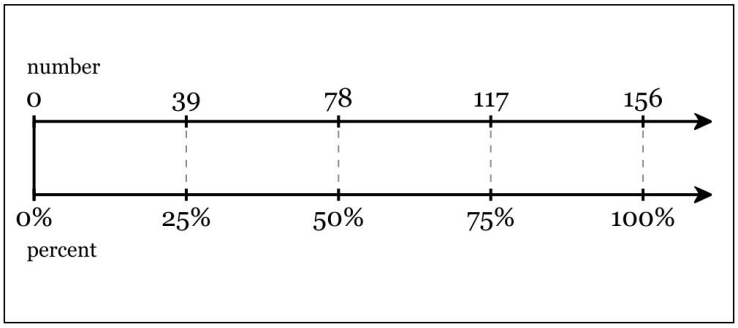
206. Fill in the following values on the double number line below: (a) 0% of 132 (b) 100% of 132 (c) 50% of 132 (d) 25% of 132 (e) 75% of 132



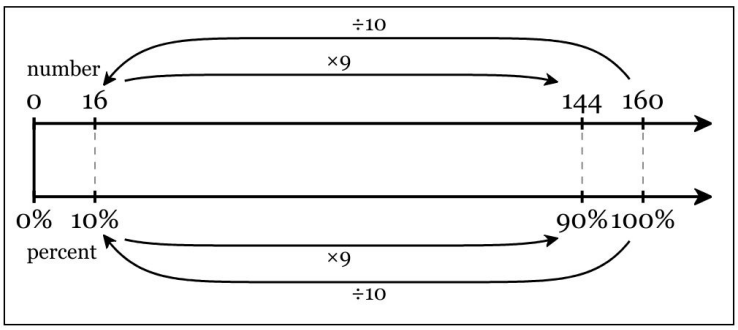
207. Fill in the following values on the double number line below: (a) 0% of 152 (b) 100% of 152 (c) 50% of 152 (d) 25% of 152 (e) 75% of 152



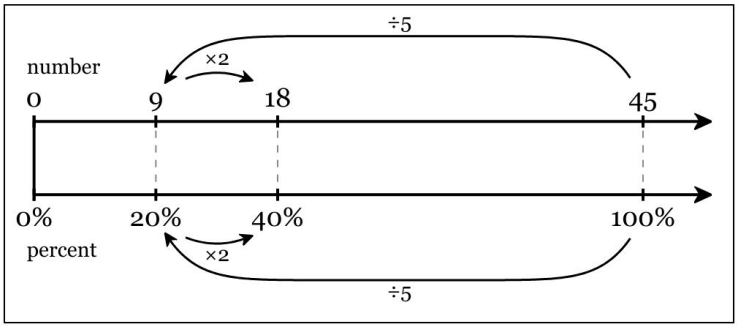
208. Fill in the following values on the double number line below: (a) 0% of 156 (b) 100% of 156 (c) 50% of 156 (d) 25% of 156 (e) 75% of 156



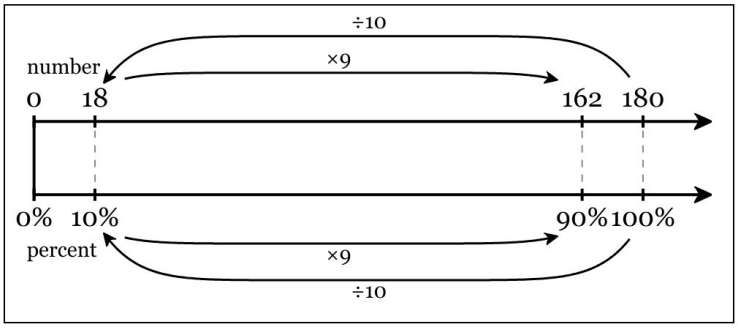
209. (a) Find 10% of 160. (b) Use 10% to find 90% of 160. Write your answers on the double number line below.



210. (a) Find 20% of 45. (b) Use 20% to find 40% of 45. Write your answers on the double number line below.



211. (a) Find 10% of 180. (b) Use 10% to find 90% of 180. Write your answers on the double number line below.



212. Rewrite this fraction problem as a percent problem.

Find $\frac{9}{10}$ of 200.

Find 90% of 200.

213. Rewrite this percent problem as a fraction problem in simplest terms.

Find 50% of 26.

Find $\frac{1}{2}$ of 26.

214. Rewrite this percent problem as a fraction problem in simplest terms.

Find 60% of 45.

Find $\frac{3}{5}$ of 45.

215. 276 is what percent of 300?

92%

216. What is 34% of 150?

51

217. What is 92% of 750?

690

218. Solve for x.

$$\frac{x}{4} = \frac{7}{2}$$

$\boxed{x = 14}$

219. Solve for x.

$$\frac{3}{2} = \frac{x}{18}$$

$\boxed{x = 27}$

220. Solve for x.

$$\frac{7}{2} = \frac{21}{x}$$

$\boxed{x = 6}$

221. In which quadrant does the point $(-4, -5)$ lie?

A. 1st Quadrant

B. 2nd Quadrant

C. 3rd Quadrant

D. 4th Quadrant

222. Select the point which lies in the first quadrant.

A. $(-7, 2)$

B. $(5, -2)$

C. $(1, 8)$

D. $(-5, -8)$

223. Select the point which lies in the second quadrant.

A. $(-7, 7)$

B. $(4, -4)$

C. $(1, 6)$

D. $(-8, -7)$

224. State the coordinates of the point.

The correct answer is $(7, -3)$

225. State the coordinates of the point.

The correct answer is $(-8, -6)$

226. State the coordinates of the point.

The correct answer is $(2, 8)$

227. State the coordinates of the point.

The correct answer is $(4, -5)$

228. State the coordinates of the point.

The correct answer is $(-4, -9)$

229. State the coordinates of the point.

The correct answer is $(-8, -2)$

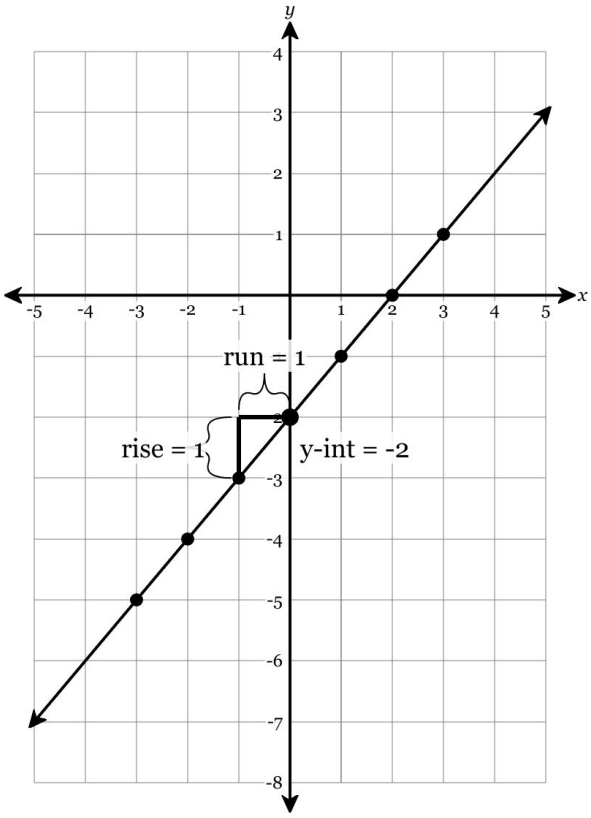
230. Given the function below, fill in the table of values and use the table values to graph.

$$y = x - 2$$

Complete the Table

x	$y = x - 2$
-3	-5
-2	-4
-1	-3
0	-2
1	-1
2	0
3	1

Complete the Graph



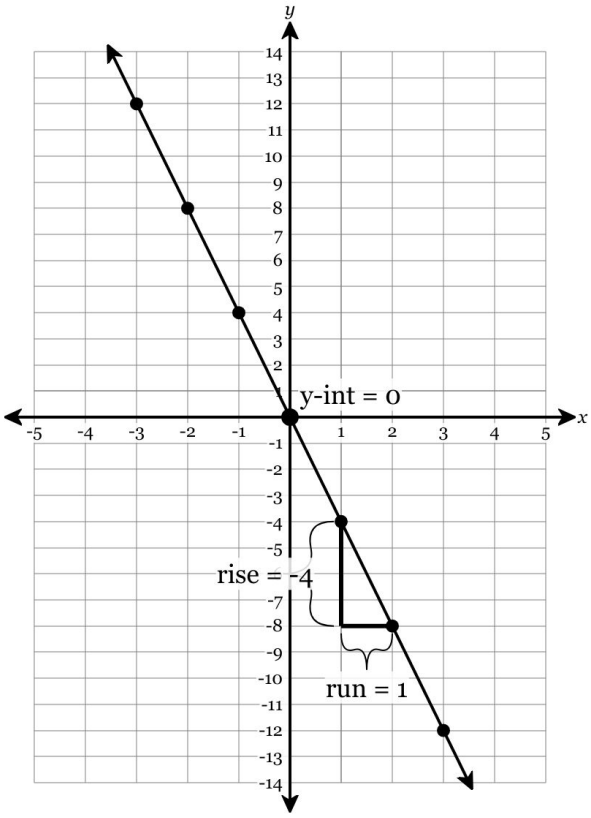
231. Given the function below, fill in the table of values and use the table values to graph.

$$y = -4x$$

Complete the Table

x	$y = -4x$
-3	12
-2	8
-1	4
0	0
1	-4
2	-8
3	-12

Complete the Graph



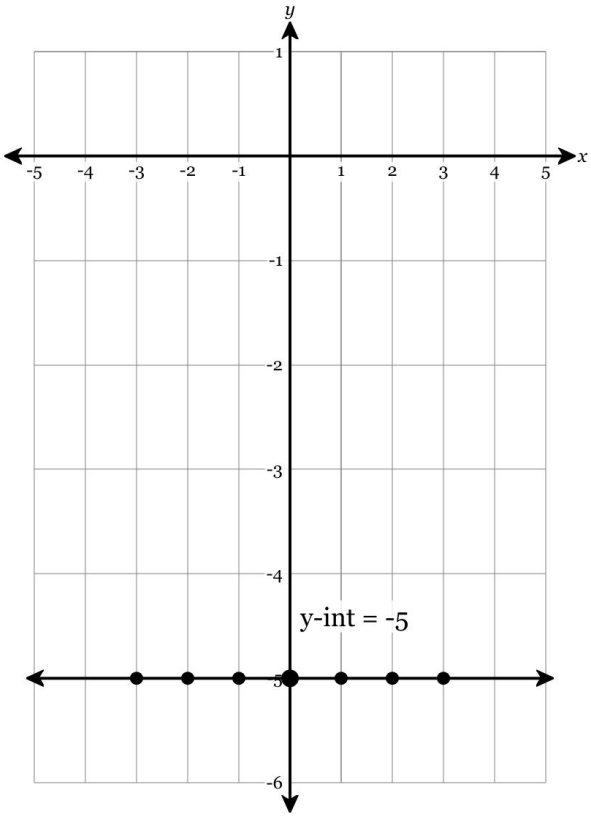
232. Given the function below, fill in the table of values and use the table values to graph.

$$y = -5$$

Complete the Table

x	$y = -5$
-3	-5
-2	-5
-1	-5
0	-5
1	-5
2	-5
3	-5

Complete the Graph



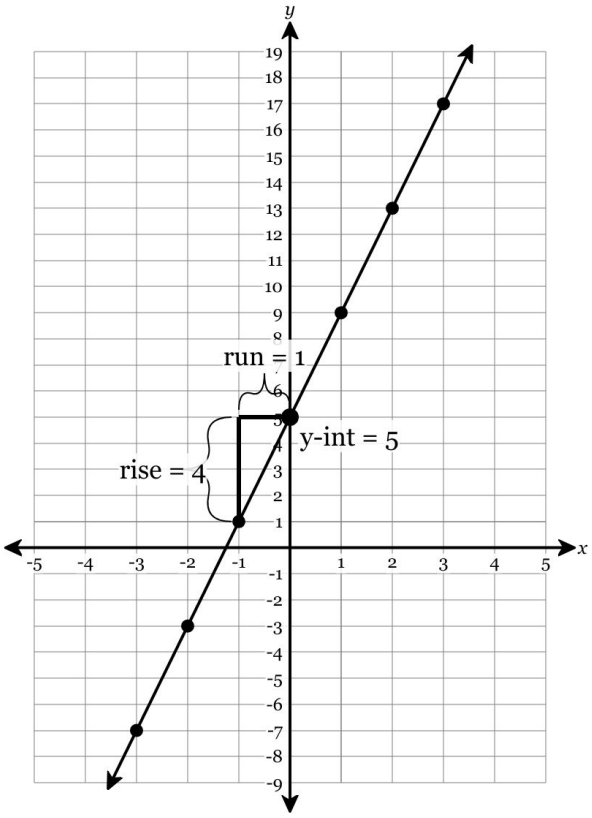
233. Given the function below, fill in the table of values and use the table values to graph.

$$y = 4x + 5$$

Complete the Table

x	$4x$	$y = 4x + 5$
-3	-12	-7
-2	-8	-3
-1	-4	1
0	0	5
1	4	9
2	8	13
3	12	17

Complete the Graph



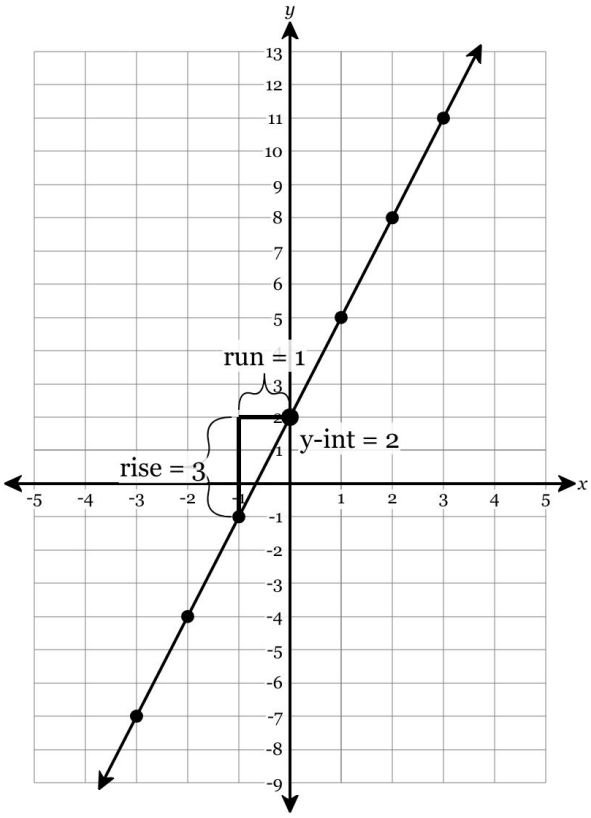
234. Given the function below, fill in the table of values and use the table values to graph.

$$y = 3x + 2$$

Complete the Table

x	$3x$	$y = 3x + 2$
-3	-9	-7
-2	-6	-4
-1	-3	-1
0	0	2
1	3	5
2	6	8
3	9	11

Complete the Graph



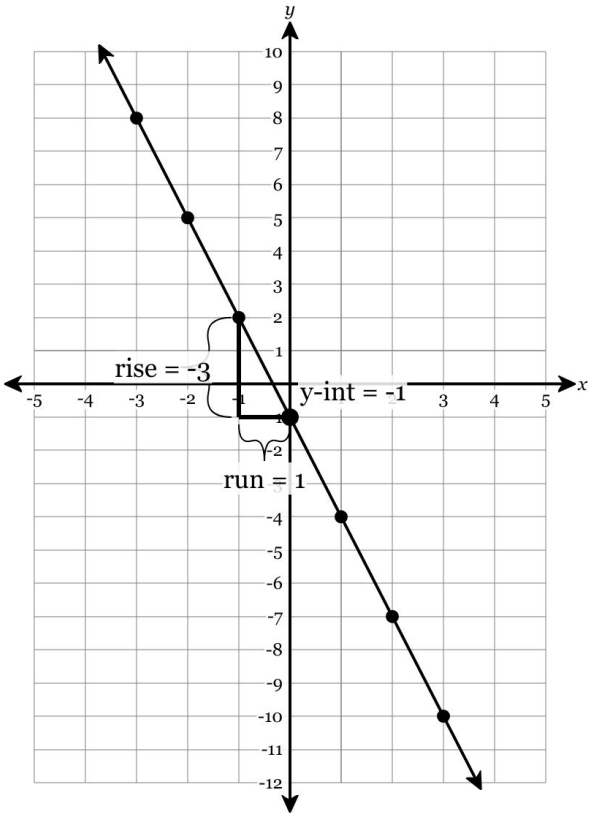
235. Given the function below, fill in the table of values and use the table values to graph.

$$y = -3x - 1$$

Complete the Table

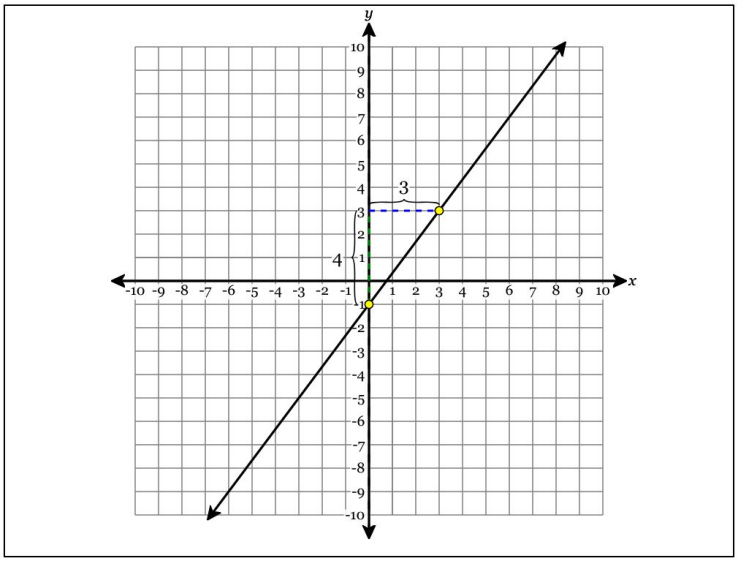
x	$-3x$	$y = -3x - 1$
-3	9	8
-2	6	5
-1	3	2
0	0	-1
1	-3	-4
2	-6	-7
3	-9	-10

Complete the Graph



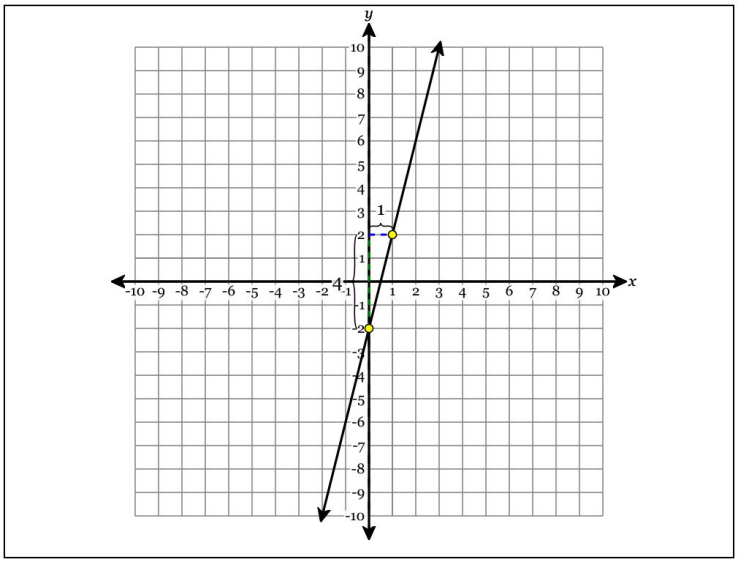
236. Graph the following features:

- Y-intercept = -1
- Slope = $\frac{4}{3}$



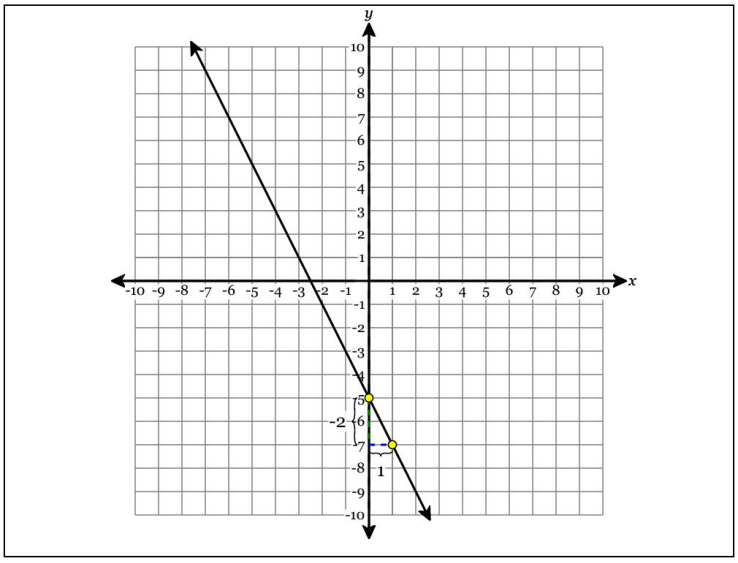
237. Graph the following features:

- Slope = 4
- Y-intercept = -2



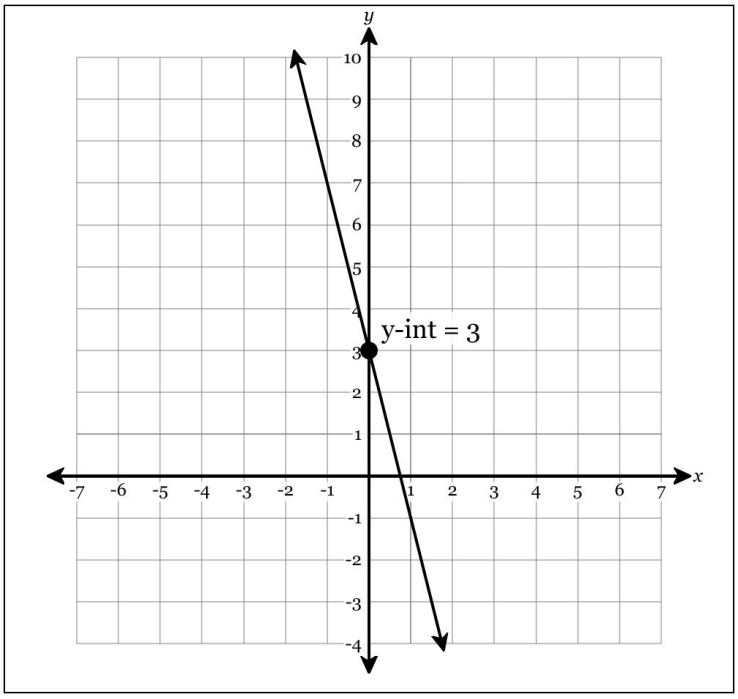
238. Graph the following features:

- Slope = -2
- Y-intercept = -5



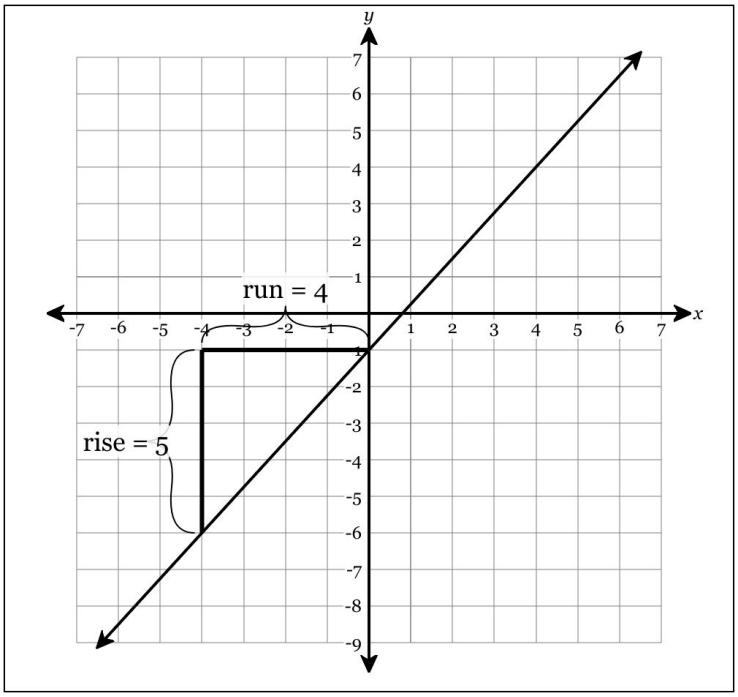
239. Find the y-intercept of the line represented by the equation below.

$$y = -4x + 3$$



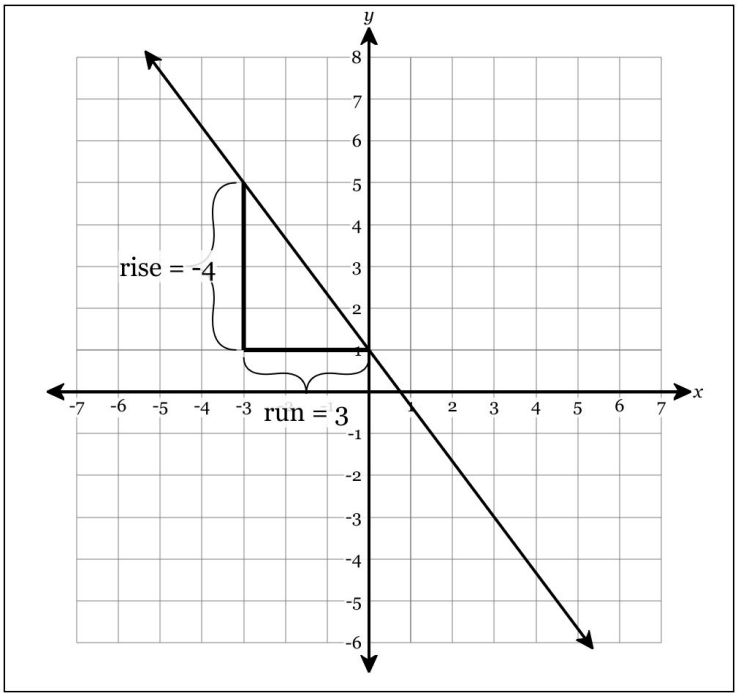
240. Find the slope of the line represented by the equation below.

$$\frac{5}{4}x - 1 = y$$



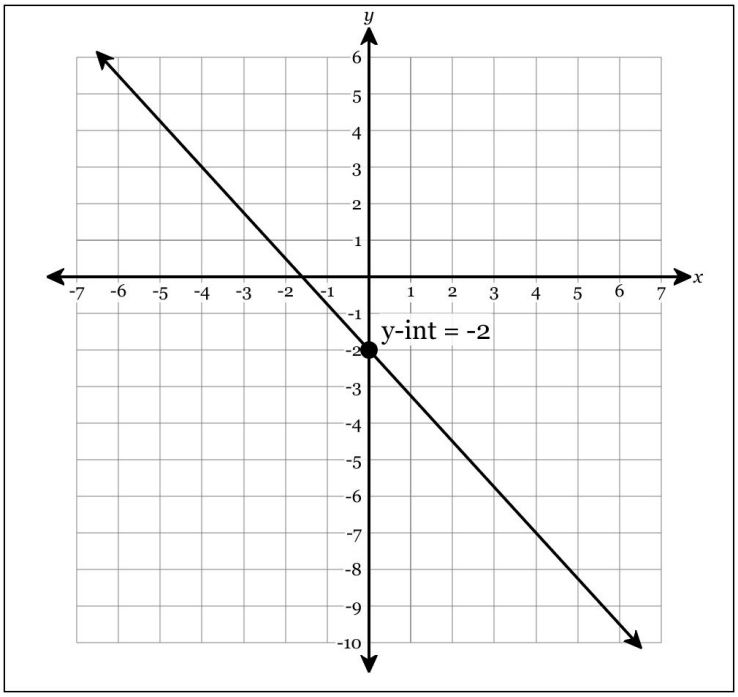
241. Find the slope of the line represented by the equation below.

$$1 - \frac{4}{3}x = y$$



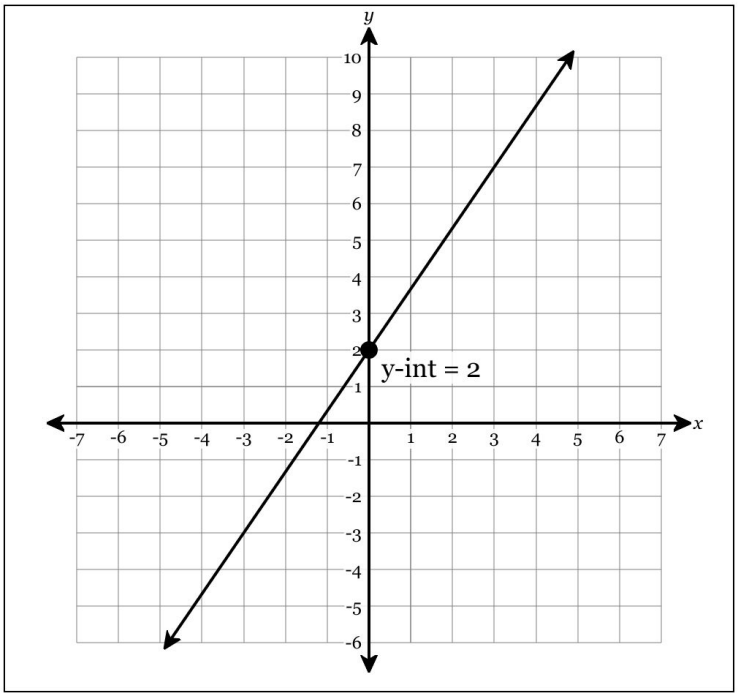
242. Find the y-intercept of the line represented by the equation below.

$$-\frac{5}{4}x - 2 = y$$

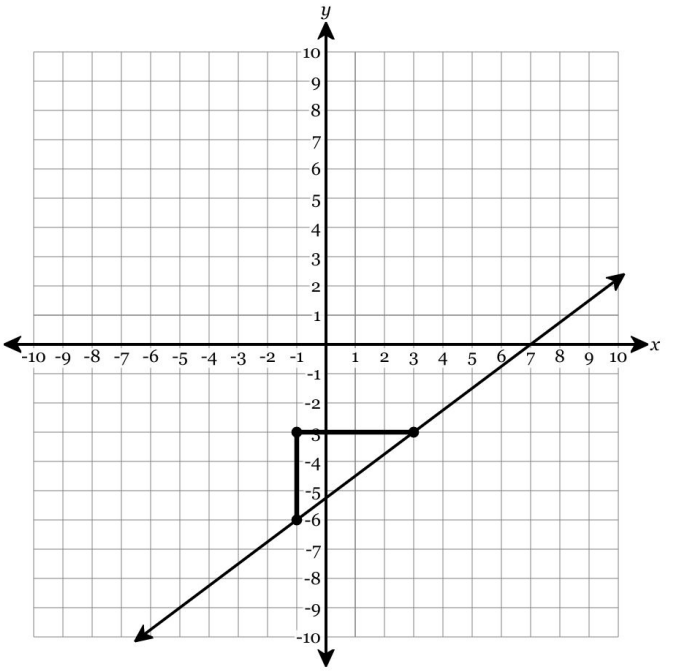


243. Find the y-intercept of the line represented by the equation below.

$$2 + \frac{5}{3}x = y$$

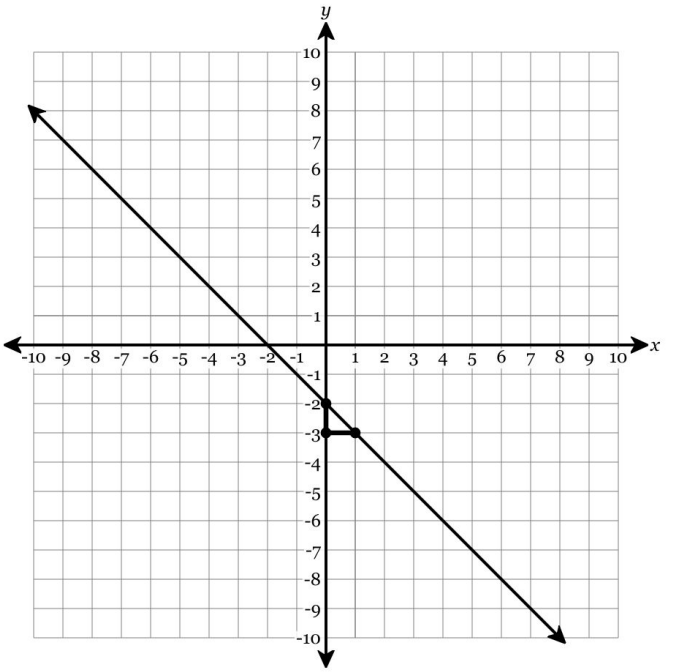


244. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



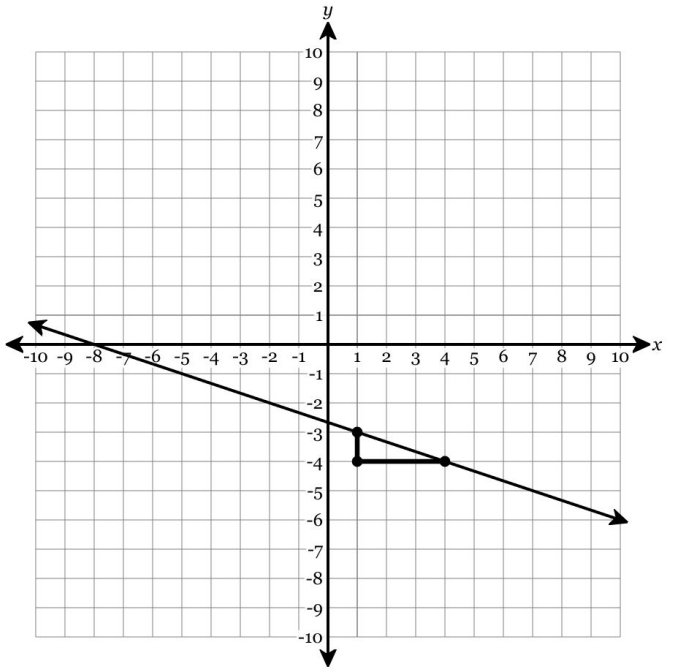
Slope $= \frac{3}{4}$

245. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



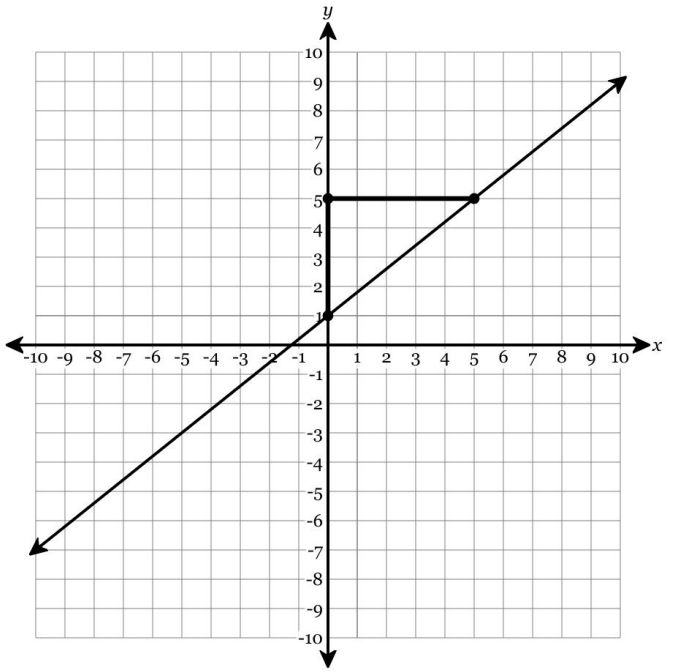
Slope $= -1$

246. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



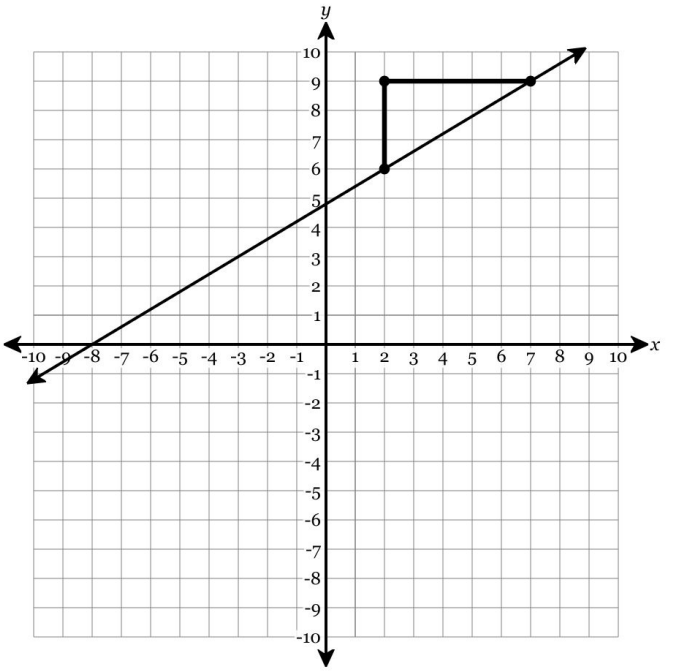
Slope $= -\frac{1}{3}$

247. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



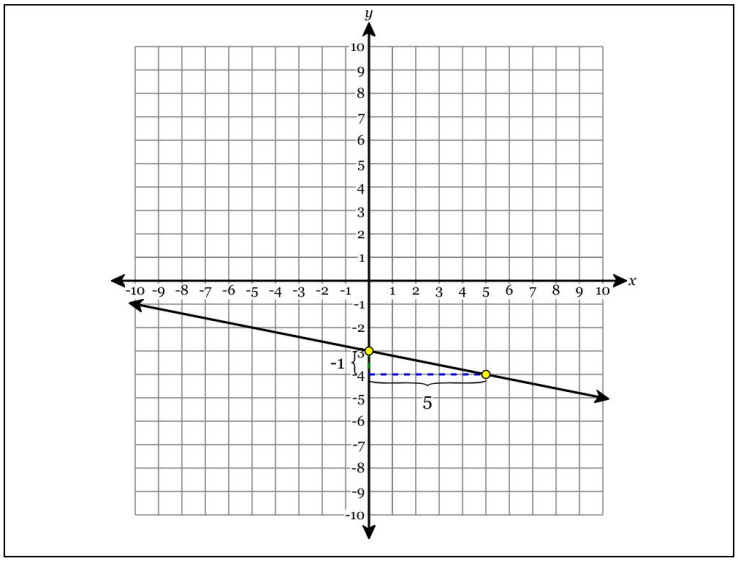
Slope $= \frac{4}{5}$

248. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.

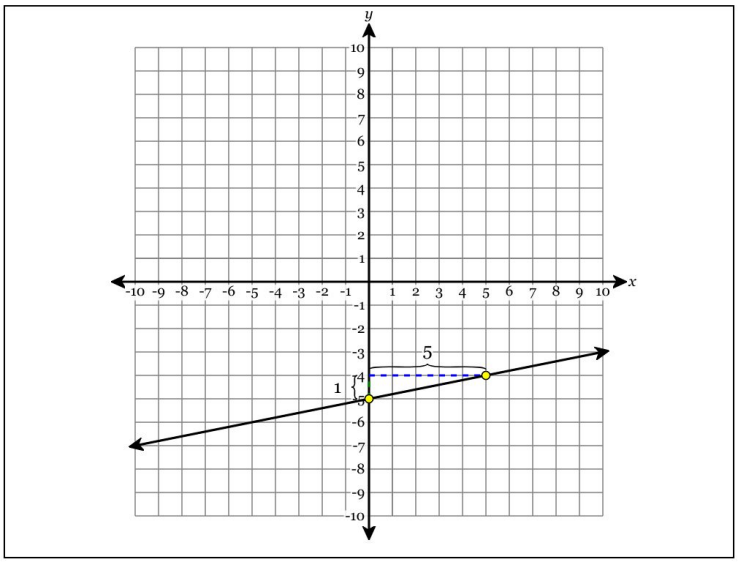


Slope $= \frac{3}{5}$

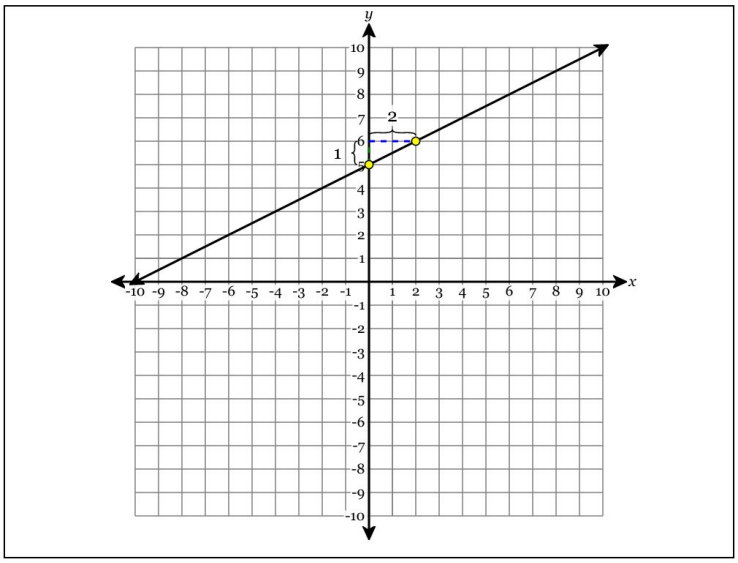
249. Graph the line with the equation $y = -\frac{1}{5}x - 3$.



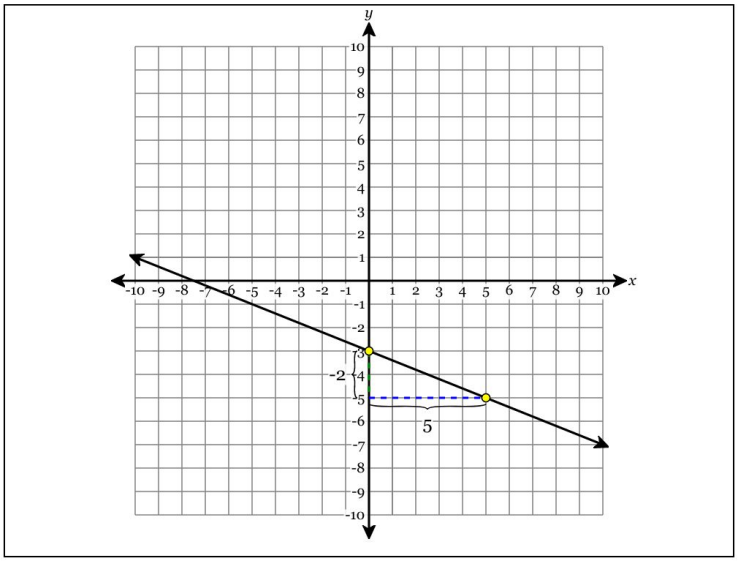
250. Graph the line with the equation $y = \frac{1}{5}x - 5$.



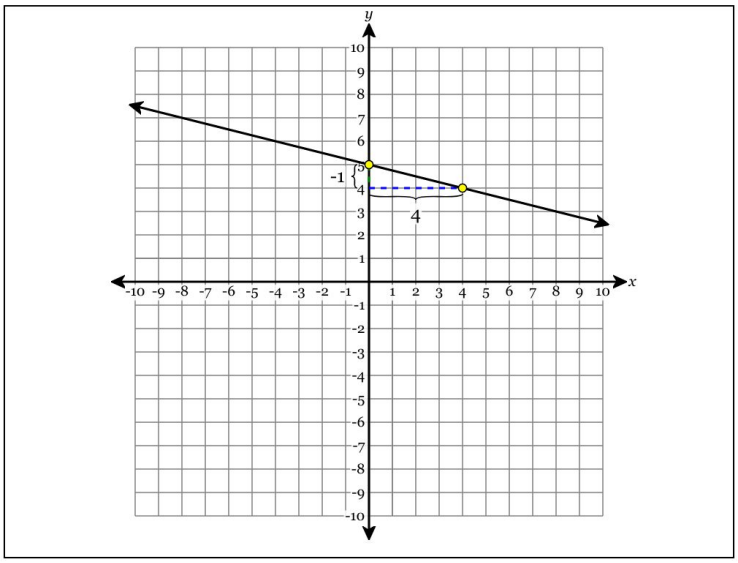
251. Graph the line with the equation $y = \frac{1}{2}x + 5$.



252. Graph the line with the equation $y = -\frac{2}{5}x - 3$.



253. Graph the line with the equation $y = -\frac{1}{4}x + 5$.



254. What is the slope of the line that passes through the points $(4, 8)$ and $(9, 8)$? Write your answer in *simplest form*.

$$0$$

255. What is the slope of the line that passes through the points $(5, 9)$ and $(-5, 14)$? Write your answer in *simplest form*.

$$-\frac{1}{2}$$

256. What is the slope of the line that passes through the points $(-3, 7)$ and $(-8, 17)$? Write your answer in *simplest form*.

$$-2$$

257. What is the slope of the line that passes through the points $(8, 1)$ and $(33, 6)$? Write your answer in *simplest form*.

$$\frac{1}{5}$$

258. What is the slope of the line that passes through the points $(10, 2)$ and $(10, 1)$? Write your answer in *simplest form*.

Undefined

259. Ian is a waiter at a restaurant. Each day he works, Ian will make a guaranteed wage of \$25, however the additional amount that Ian earns from tips depends on the number of tables he waits on that day. From past experience, Ian noticed that he will get about \$6 in tips for each table he waits on. How much would Ian expect to earn in a day on which he waits on 14 tables? How much would Ian expect to make in a day when waiting on t tables?

Total earnings with 14 tables: \$109

Total Earnings with t tables: $6t + 25$

260. Brooklyn went to the store to buy some cherries. The price per pound of the cherries is \$6 per pound and she has a coupon for \$1.75 off the final amount. With the coupon, how much would Brooklyn have to pay to buy 5 pounds of cherries? Also, write an expression for the cost to buy p pounds of cherries, assuming at least one pound is purchased.

Final cost of 5 pounds: \$28.25

Final cost of p pounds: $6p - 1.75$

261. At the end of a snowstorm, Juan had 13 inches of snow on his lawn. The temperature then increased and the snow began to melt at a constant rate of 2.5 inches per hour. Assuming no more snow was falling, how much snow would Juan have on his lawn 3 hours after the snow began to melt? How much snow would Juan have on his lawn after t hours of snow melting?

Snow on lawn after 3 hours: 5.5 inches

Snow on lawn after t hours: $13 - 2.5t$

262. At the beginning of spring, Rahul planted a small sunflower in his backyard. When it was first planted, the sunflower was 25 inches tall. The sunflower then began to grow at a rate of 2.5 inches per week. How tall would the sunflower be after 4 weeks? How tall would the sunflower be after w weeks?

Height after 4 weeks: 35 inches

Height after w weeks: $2.5w + 25$

263. Jocelyn just accepted a job at a new company where she will make an annual salary of $65000. Jocelyn was told that for each year she stays with the company, she will be given a salary raise of $3000. How much would Jocelyn make as a salary after 7 years working for the company? What would be her salary after t years?

Salary after 7 years: $86000

Salary after t years: $3000t + 65000$

264. Starting at noon, Ella observed the amount of snow on her lawn during a blizzard. She wrote an equation to represent s, how many inches of snow were on the lawn: $s = 2.5 + 0.022x$, where x represents the number of minutes past noon. What is the meaning of the s-value when $x = 1$?

A. How much more snow is added to the lawn every minute.

B. The amount of snow on the lawn at 12:01 p.m.

C. The amount of snow on the lawn when the blizzard ended.

D. The amount of snow on the lawn at 1 p.m.

265. There's a roughly linear relationship between the length of someone's femur (the long leg-bone in your thigh) and their expected height. Within a certain population, this relationship can be expressed using the formula $h = 2.48f + 65$, where h represents the expected height in centimeters and f represents the length of the femur in centimeters. What is the meaning of the f-value when $h = 152$?

A. The femur length for someone with an expected height of 152 centimeters.

B. The change in expected height for every one additional centimeter of femur length.

C. The expected height for someone with a femur length of 152 centimeters.

D. The femur length for someone with an expected height of 35.1 centimeters.

266. Starting at noon, Nathaniel observed the amount of snow on his lawn during a blizzard. He wrote an equation to represent s, how many inches of snow were on the lawn: $s = 0.022x + 3.5$, where x represents the number of minutes past noon. What could the number 3.5 represent in the equation?

A. The change in the amount of snow on the lawn for every one additional minute.

B. The amount of snow on the lawn when Nathaniel began to measure.

C. The amount of snow on the lawn when the blizzard ended.

D. The amount of snow on the lawn at 1 p.m.

267. There's a roughly linear relationship between the number of times a species of cricket will chirp in one minute and the temperature outside. For a certain type of cricket, this relationship can be expressed using the formula $T = 31 + 0.35c$, where T represents the temperature in degrees Fahrenheit and c represents the number of times the cricket chirps in one minute. What could the number 0.35 represent in the equation?

A. The change in temperature in degrees Fahrenheit for each additional cricket chirp in one minute.

B. The change in cricket chirps per minute for each additional degree Fahrenheit.

C. How long the cricket continues to chirp.

D. The expected temperature in degrees Fahrenheit if the cricket has chirped 0.35 times per minute.

268. There's a roughly linear relationship between the number of times a species of cricket will chirp in one minute and the temperature outside. For a certain type of cricket, this relationship can be expressed using the formula $T = 0.28c + 36$, where T represents the temperature in degrees Fahrenheit and c represents the number of times the cricket chirps in one minute. What is the meaning of the T-value when $c = 82$?

A. The number of times the cricket could be expected to chirp in one minute if it's 82° F.

B. The change in temperature in degrees Fahrenheit for each additional cricket chirp in one minute.

C. The expected temperature in degrees Fahrenheit if the cricket has chirped 82 times per minute.

D. The expected temperature in degrees Fahrenheit if the cricket has chirped 0 times per minute.

269. Find the median and mean of the data set below:

$$37, 10, 3, 48, 46, 8, 2$$

$\text{Median} = 10$

$\text{Mean} = 22$

270. Find the median and mean of the data set below:

$$8, 13, 21, 12, 5, 16$$

$\text{Median} = 12.5$

$\text{Mean} = 12.5$

271. Find the median and mean of the data set below:

$$12, 13, 44, 13, 22, 35, 22$$

$\text{Median} = 22$

$\text{Mean} = 23$

272. Find the median and mean of the data set below:

$$36, 6, 5, 38, 7, 16$$

$\text{Median} = 11.5$

$\text{Mean} = 18$

273. Find the median and mean of the data set below:

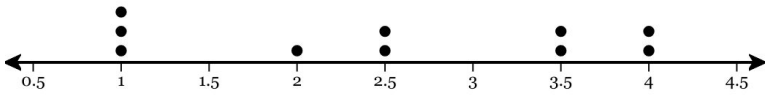
$$21, 49, 48, 16, 24$$

$\text{Median} = 24$

$\text{Mean} = 31.6$

274. The students in a class collected data on the number of minutes some of them spend brushing their teeth every day. That data is shown in the dot plot below.

BRUSHING TEETH



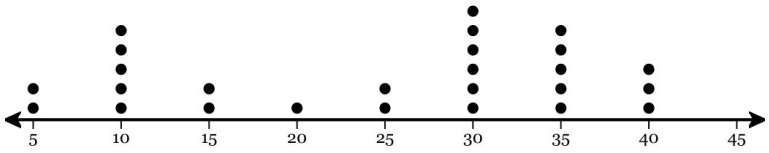
Time Brushing (minutes)

What was the range of minutes students brushed their teeth?

3 minutes

275. The dot plot below represents how long it takes students in a 7th grade math class to get to school every morning.

COMMUTE TIME



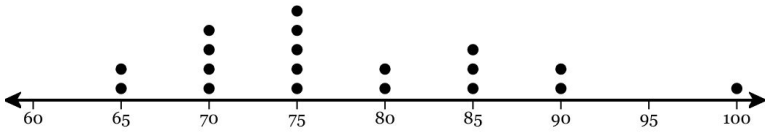
Minutes

What was the shortest commute time?

5 minutes

276. A teacher put all her students' quiz scores up on the dot plot below.

QUIZ SCORES



Points

How many students scored 90?

2 students

277. Certain students tracked the number of pages they read in a week. Use the data to create a frequency table.

$$26,\ 31,\ 33,\ 33,\ 36,\ 37,\ 42,\ 43,\ 52,\ 61,\ 70,\ 73,\ 74,\ 78,\ 80$$

Interval	Tally
Less than 40	𝍸 |
40 to less than 60	|||
60 to less than 80	𝍸
80 and up	|

278. Certain students recorded the number of hours they spent on homework this week, as shown in the data below. Use the data to create a frequency table.

$0,\ \frac{1}{2},\ 1\frac{1}{2},\ 1\frac{1}{2},\ 2,\ 2,\ 2\frac{1}{2},\ 3\frac{1}{2},\ 4,\ 4\frac{1}{2},\ 6,\ 7,\ 7$

Interval	Tally
Less than 2	||||
2 to less than 4	||||
4 to less than 6	||
6 and up	|||

279. Certain students participated in the long jump at field day. The length of their jumps, in inches, is shown in the data below. Use the data to create a frequency table.

$62,\ 62\frac{1}{2},\ 62\frac{1}{2},\ 63,\ 65\frac{1}{2},\ 66,\ 66\frac{1}{2},\ 66\frac{1}{2},\ 68,\ 72\frac{1}{2},\ 74,\ 78\frac{1}{2}$

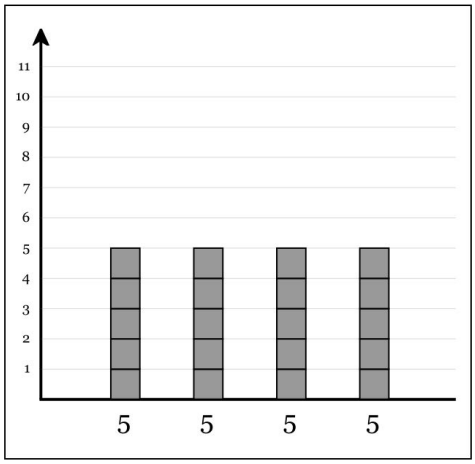
Interval	Tally
Less than 66	~~||||~~
66 to less than 72	||||
72 to less than 78	||
78 and up	|

280. Find the mean of $9, 8, 1, 2$ graphically.

(a) What is the sum of the numbers? $\boxed{20}$

(b) What is the average value? $\boxed{5}$

(c) On the graph below, spread out the values into even stacks. To remove a block from a stack, cross it out. To add a block to a stack, draw it in. Once the stacks are even, write how many blocks are in each stack in the space below.

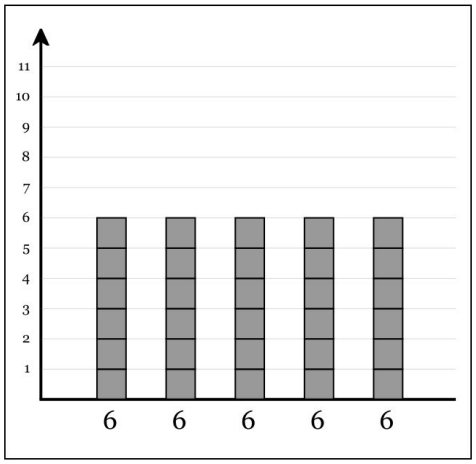


281. Find the mean of $5, 1, 8, 7, 9$ graphically.

(a) What is the sum of the numbers? $\boxed{30}$

(b) What is the average value? $\boxed{6}$

(c) On the graph below, spread out the values into even stacks. To remove a block from a stack, cross it out. To add a block to a stack, draw it in. Once the stacks are even, write how many blocks are in each stack in the space below.

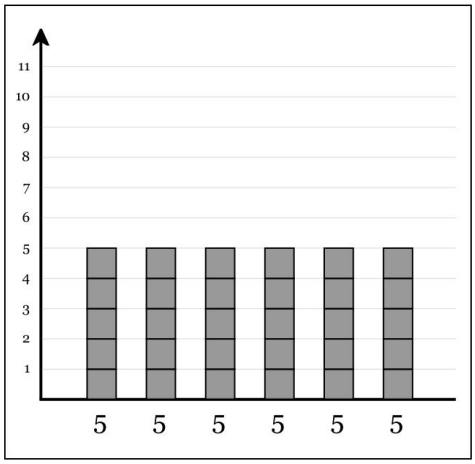


282. Find the mean of $1, 9, 4, 1, 8, 7$ graphically.

(a) What is the sum of the numbers? $\boxed{30}$

(b) What is the average value? $\boxed{5}$

(c) On the graph below, spread out the values into even stacks. To remove a block from a stack, cross it out. To add a block to a stack, draw it in. Once the stacks are even, write how many blocks are in each stack in the space below.

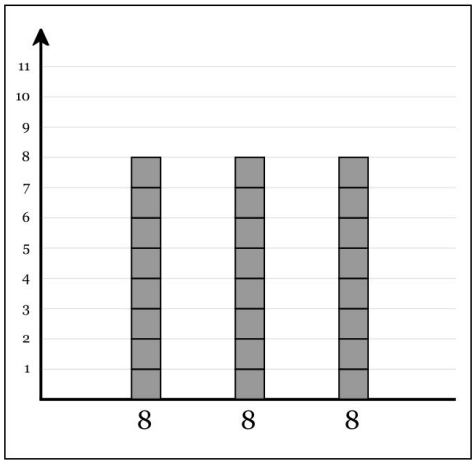


283. Find the mean of $10, 5, 9$ graphically.

(a) What is the sum of the numbers? 24

(b) What is the average value? 8

(c) On the graph below, spread out the values into even stacks. To remove a block from a stack, cross it out. To add a block to a stack, draw it in. Once the stacks are even, write how many blocks are in each stack in the space below.



284. Find the mean of $4, 10$ graphically.

(a) What is the sum of the numbers? 14

(b) What is the average value? 7

(c) On the graph below, spread out the values into even stacks. To remove a block from a stack, cross it out. To add a block to a stack, draw it in. Once the stacks are even, write how many blocks are in each stack in the space below.