

Name _____ Algebra I Summer

Add:

1. $8\frac{1}{2} + 1\frac{1}{5}$

[A] $7\frac{7}{13}$

[B] $9\frac{5}{13}$

[C] 10

[D] $9\frac{7}{10}$

[1] _____

2. $3\frac{2}{9} + 1\frac{1}{2}$

[A] $4\frac{13}{18}$

[B] 5

[C] $4\frac{1}{13}$

[D] $4\frac{4}{13}$

[2] _____

Subtract:

3. $5\frac{1}{3} - 2\frac{7}{8}$

[A] $2\frac{11}{24}$

[B] $3\frac{5}{48}$

[C] $3\frac{3}{16}$

[D] $1\frac{47}{48}$

[3] _____

4. $3\frac{2}{5} - 1\frac{1}{2}$

[A] $2\frac{3}{20}$

[B] $1\frac{9}{10}$

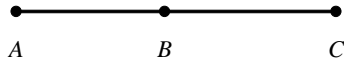
[C] $2\frac{1}{20}$

[D] $1\frac{3}{5}$

[4] _____

Name _____ Algebra I Summer

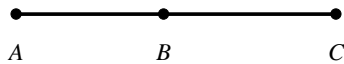
5. The length of \overline{AC} is $4\frac{2}{3}$ meters. The length of \overline{BC} is $2\frac{1}{2}$ meters. Find AB .



- [A] 3 m [B] $7\frac{1}{6}$ m [C] $6\frac{3}{5}$ m [D] $2\frac{1}{6}$ m

[5] _____

6. The length of \overline{AC} is $8\frac{1}{8}$ meters. The length of \overline{AB} is $3\frac{3}{4}$ meters. Find BC .



- [A] $4\frac{1}{2}$ m [B] $11\frac{1}{3}$ m [C] $4\frac{3}{8}$ m [D] $11\frac{7}{8}$ m

[6] _____

7. The measure of angle B is 63° . Classify angle B .

- [A] straight [B] right [C] acute [D] obtuse

[7] _____

8. The measure of angle A is 146° . Classify angle A .

- [A] obtuse [B] acute [C] straight [D] right

[8] _____

9. The measure of angle A is 90° . Classify angle A .

- [A] acute [B] right [C] obtuse [D] straight

[9] _____

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10. What is the name of a polygon with 7 sides?

- [A] decagon [B] heptagon [C] pentagon [D] octagon

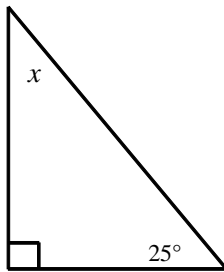
[10] _____

11. What is the name of a polygon with 8 sides?

- [A] pentagon [B] heptagon [C] decagon [D] octagon

[11] _____

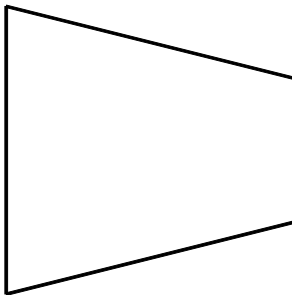
12. Find the value of x .



- [A] 155° [B] 65° [C] 130° [D] 115°

[12] _____

13. Which **BEST** describes the figure correctly?

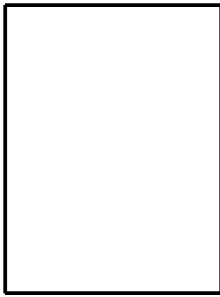


- [A] parallelogram [B] polygon [C] quadrilateral [D] trapezoid

[13] _____

Name _____ Algebra I Summer

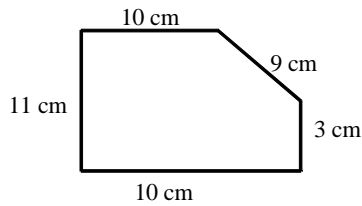
14. Which **BEST** describes the figure correctly?



- [A] quadrilateral [B] rhombus [C] parallelogram [D] rectangle

[14] _____

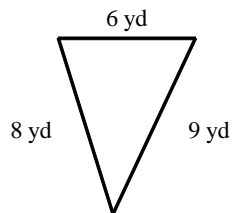
15. Find the perimeter of the figure.



- [A] 46 cm [B] 53 cm [C] 39 cm [D] 43 cm

[15] _____

16. Find the perimeter of the figure.



- [A] 28 yd [B] 22 yd [C] 23 yd [D] 33 yd

[16] _____

Name _____ Algebra I Summer

Multiply:

17. $\frac{6}{7} \times \frac{3}{5} \times \frac{6}{35}$

[A] none of these

[B] $\frac{108}{1225}$

[C] $\frac{756}{1715}$

[D] $\frac{108}{35}$

[17] _____

18. $\frac{4}{5} \times \frac{3}{7} \times \frac{5}{42}$

[A] $\frac{10}{49}$

[B] $\frac{10}{7}$

[C] none of these

[D] $\frac{300}{1050}$

[18] _____

Divide:

19. $\frac{6}{7} \div 2\frac{1}{4}$

[A] $4\frac{2}{3}$

[B] $\frac{8}{21}$

[C] $1\frac{1}{3}$

[D] $\frac{7}{11}$

[19] _____

20. $2\frac{6}{7} \div 3\frac{4}{7}$

[A] $1\frac{2}{5}$

[B] $2\frac{9}{20}$

[C] $1\frac{1}{2}$

[D] $\frac{4}{5}$

[20] _____

Name _____ Algebra I Summer

21. What is the result of a division called?

- [A] dividend [B] quotient [C] divisor [D] difference

[21] _____

22. What is the result of an addition called?

- [A] sum [B] factor [C] addend [D] product

[22] _____

23. What is the result of a multiplication called?

- [A] quotient [B] sum [C] product [D] factor

[23] _____

24. What is the result of a subtraction called?

- [A] difference [B] quotient [C] subtrahend [D] minuend

[24] _____

25. 53.6×0.015

- [A] 8.04 [B] 0.804 [C] 804 [D] 0.0804

[25] _____

26. 5.96×1.2

- [A] 0.7152 [B] 71.52 [C] 715.2 [D] 7.152

[26] _____

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27. $9.92 - 2.324$

[A] 8.596

[B] 7.596

[C] 6.768

[D] 6.596

[27] _____

28. $13.47 - 2.925$

[A] 10.545

[B] 9.545

[C] 10.122

[D] 11.545

[28] _____

Add:

29. $2.89 + 3.803$

[A] 6.693

[B] 13.92

[C] 13.119

[D] 5.892

[29] _____

30. $5.907 + 4.45$

[A] 18.52

[B] 18.115

[C] 9.952

[D] 10.357

[30] _____

31. $\{0, 1, 2, 3, 4, 5, \dots\}$ designates the set of _____.

[A] imaginary numbers

[B] integers

[C] whole numbers

[D] natural numbers

[31] _____

32. $(+15) + (-8)$

[A] -23

[B] +7

[C] -7

[D] +23

[32] _____

Name _____ Algebra I Summer

33. $(+4) + (-18)$

[A] +22

[B] -22

[C] -14

[D] +14

[33] _____

34. $(+9) + (-19)$

[A] +28

[B] +10

[C] -28

[D] -10

[34] _____

35. $(+2) + (-15)$

[A] +17

[B] -17

[C] +13

[D] -13

[35] _____

Add:

36. $(-6) + (+4) + (-5)$

[A] +15

[B] -7

[C] -15

[D] +7

[36] _____

37. $(-4) + (+2) + (-3)$

[A] -5

[B] +9

[C] -9

[D] +5

[37] _____

38. $(-2) + (+9) + (-4)$

[A] -15

[B] +15

[C] +3

[D] -3

[38] _____

Name _____ Algebra I Summer

Simplify:

39. $-20+1-8-14-18+5+4$

[A] -14

[B] -50

[C] -10

[D] 34

[39] _____

40. $-14-20+14-8+5+11+6$

[A] -28

[B] -26

[C] -6

[D] -30

[40] _____

41. $-8+16-1+10-3-15+8$

[A] 7

[B] -27

[C] 13

[D] 15

[41] _____

42. $-(-2)-(-6)-(-11)$

[A] -3

[B] -15

[C] -19

[D] 19

[42] _____

43. $-(-1)-(-8)+(-8)$

[A] 1

[B] 17

[C] -17

[D] -15

[43] _____

44. $(-4)(+6)$

[A] +2

[B] +24

[C] -10

[D] -24

[44] _____

Name _____ Algebra I Summer

45. $(+2)(-8)$

[A] -6

[B] $+10$

[C] $+16$

[D] -16

[45] _____

46. $(-3)(+5)$

[A] $+15$

[B] -8

[C] -15

[D] $+2$

[46] _____

47. Name the inverse operation. Subtract 9.

[A] Multiply by 9.

[B] Divide by -9 .

[C] Add -9 .

[D] Add 9.

[47] _____

48. $\frac{42}{-6}$

[A] 7

[B] -6

[C] 6

[D] -7

[48] _____

49. $\frac{15}{-3}$

[A] -5

[B] -4

[C] 4

[D] 5

[49] _____

Name _____ Algebra I Summer

50. Simplify: $\frac{5+2+(-7)}{-1+(-9)+4}$

- [A] Indeterminate [B] -6 [C] Undefined [D] 0

[50] _____

Multiply:

51. $-9(6)(6)(1)$

- [A] 4 [B] 324 [C] -4 [D] -324

[51] _____

52. $-6(2)(4)(2)$

- [A] 2 [B] -96 [C] 96 [D] -2

[52] _____

53. $-5(7)(-7)(-1)$

- [A] 245 [B] 6 [C] -245 [D] -6

[53] _____

Simplify:

54. $6 \cdot 9 - 8(-4) + 3$

- [A] 89 [B] -21 [C] -6 [D] 25

[54] _____

55. $3 \cdot 8 - 5(-7) + 2$

- [A] -9 [B] -45 [C] 61 [D] -61

[55] _____

Name _____ Algebra I Summer

Simplify:

56. $2 \cdot 5 - 6(9) + 4$

[A] -14

[B] 68

[C] -26

[D] -40

[56] _____

57. $4 \cdot 6 - 3(-8) + 7$

[A] 55

[B] 7

[C] -89

[D] -12

[57] _____

58. $(6)(4) - (2)(3) + 6 =$

[A] 12

[B] 6

[C] 24

[D] 72

[58] _____

59. $(8)(9) - (3)(5) + 8 =$

[A] 353

[B] 49

[C] 33

[D] 65

[59] _____

Simplify.

60. $-3(-4 + 2)$

[A] -10

[B] 6

[C] 14

[D] -6

[60] _____

61. $-4(-2 + 3)$

[A] -5

[B] 11

[C] -4

[D] 4

[61] _____

Name _____ Algebra I Summer

Simplify.

62. $2(-5 + 4)$

[A] 14

[B] 2

[C] -6

[D] -2

[62] _____

63. $-(-9) - 8(3 - 2)$

[A] -31

[B] -17

[C] 1

[D] 17

[63] _____

64. $-(-5) - 2(6 - 5)$

[A] 7

[B] 3

[C] -12

[D] -17

[64] _____

65. Simplify: $17(153 - 18 \div 9) + 3 \cdot 8$

[A] 2625

[B] 20,560

[C] 2112

[D] 2591

[65] _____

66. Evaluate $4j + k$ if $j = 6$ and $k = 12$.

[A] 36

[B] 54

[C] 72

[D] 12

[66] _____

67. Evaluate $2r - s$ if $r = 7$ and $s = 5$.

[A] 19

[B] 9

[C] 3

[D] 4

[67] _____

Name _____ Algebra I Summer

68. $3^4 =$

[A] 243

[B] 12

[C] 81

[D] 64

[68] _____

69. $3^3 =$

[A] 26

[B] 28

[C] 29

[D] 27

[69] _____

Simplify:

70. $(-4)^3$

[A] 64

[B] -64

[C] -12

[D] 12

[70] _____

71. $(-4)^2$

[A] 8

[B] -8

[C] -16

[D] 16

[71] _____

72. Which is a solution of the equation $x + 9 = 4$?

[A] -13

[B] -5

[C] 5

[D] 13

[72] _____

73. Which is a solution of the equation $x - 2 = -3$?

[A] -1

[B] 1

[C] 5

[D] -5

[73] _____

Name _____ Algebra I Summer

74. Which is a solution of the equation $x + 5 = -2$?

[A] -7

[B] 3

[C] 7

[D] -3

[74] _____

75. Which is a solution of the equation $x - 6 = 8$?

[A] -2

[B] -14

[C] 2

[D] 14

[75] _____

Solve:

76. $27 = m + 5$

[A] 24

[B] 135

[C] 32

[D] 22

[76] _____

77. $17 = m - 2$

[A] 18

[B] 34

[C] 15

[D] 19

[77] _____

78. $28 = m + 6$

[A] 24

[B] 168

[C] 22

[D] 34

[78] _____

79. $72 = 8y$

[A] $\frac{1}{9}$

[B] 8

[C] 9

[D] 80

[79] _____

Name _____ Algebra I Summer

Solve:

80. $72 = 9y$

[A] $\frac{1}{63}$

[B] 63

[C] 8

[D] 81

[80] _____

81. $20 = 5y$

[A] 25

[B] 4

[C] 5

[D] $\frac{1}{4}$

[81] _____

82. $8x + 8 = 80$

[A] 9

[B] 88

[C] 72

[D] 11

[82] _____

83. Which algebraic phrase corresponds to the following word phrase?

The sum of four times the opposite of a number and 6.

[A] $6(-N) + 4$

[B] $(-N)(-N)(-N)(-N) + 6$

[C] $4(-N) + 6$

[D] $N - 4 + 6$

[83] _____

84. Compare:

$6 \bigcirc -8$

[A] =

[B] <

[C] Not Given

[D] >

[84] _____

Name _____ Algebra I Summer

85. Compare:

$$3 \bigcirc -6$$

[A] <

[B] =

[C] >

[D] Not Given

[85] _____

86. Compare:

$$4 \bigcirc -3$$

[A] Not Given

[B] <

[C] =

[D] >

[86] _____

87. Compare:

$$-9 \bigcirc -2$$

[A] <

[B] =

[C] >

[D] Not Given

[87] _____

88. Find the least common multiple of 24, 4, and 18.

[A] 1,728

[B] 72

[C] 74

[D] 4

[88] _____

89. Find the least common multiple of 24, 3, and 18.

[A] 72

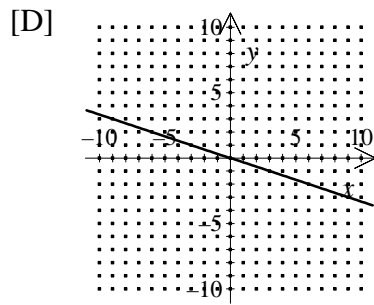
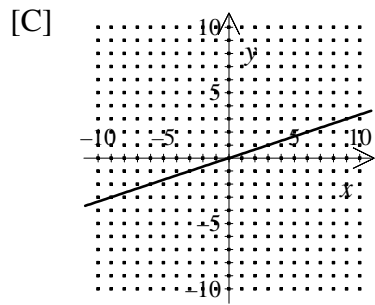
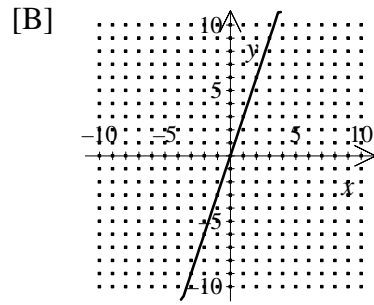
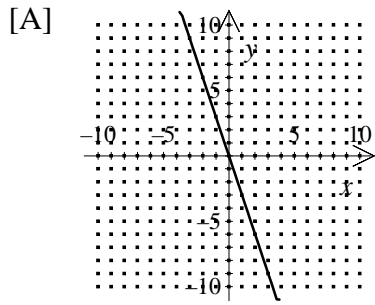
[B] 70

[C] 1,296

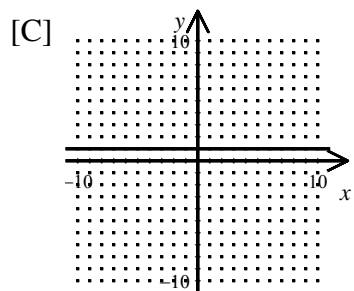
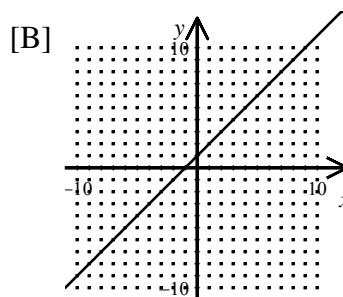
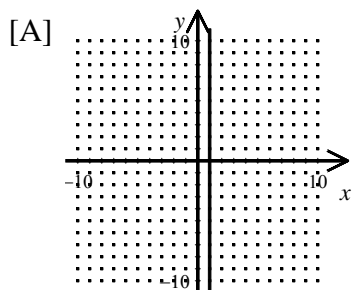
[D] 3

[89] _____

90. Which shows the graph of $y = -3x$?

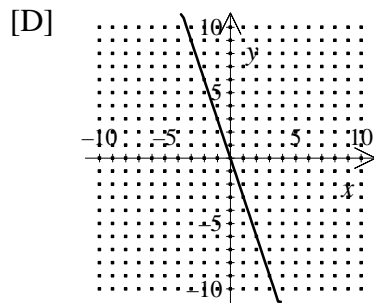
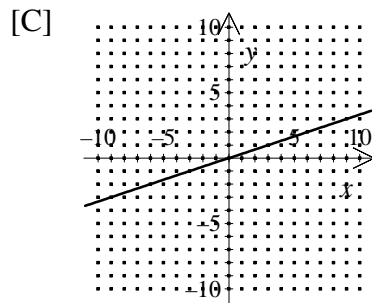
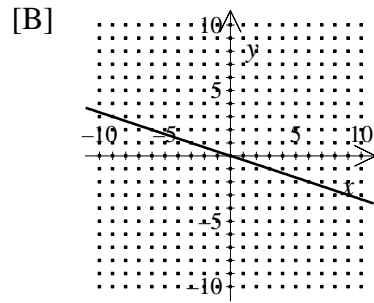
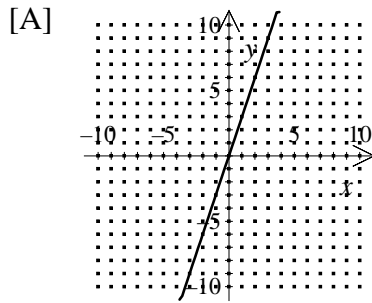


91. Graph: $y = 1$

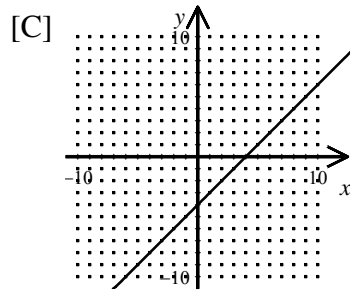
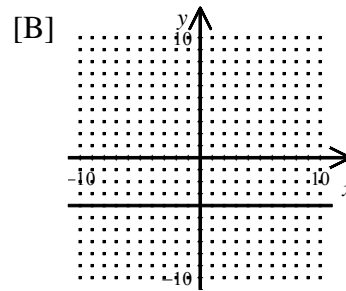
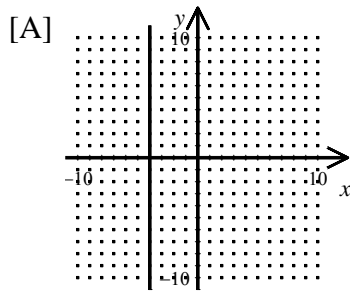


[D] none of these

92. Which shows the graph of $y = 3x$?



93. Graph: $x = -4$



[D] none of these

[93] _____

94. Write in scientific notation: 0.00052

- [A] 5.2×10^{-2} [B] 5.2×10^{-3} [C] 5.2×10^{-4} [D] 52×10^{-3}

[94] _____

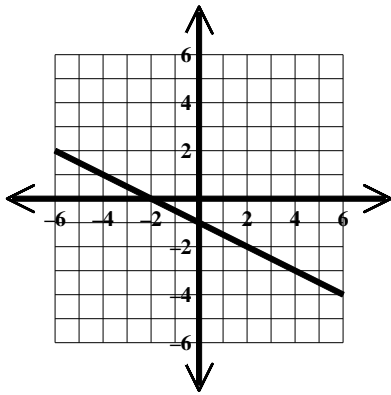
95. Write in scientific notation: 64,000,000

- [A] 64×10^6 [B] 6.4×10^7 [C] 6.4×10^8 [D] 6.4×10^9

[95] _____

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96. Which of these equations is shown on the graph?



- [A] $y = -\frac{1}{2}x - 1$ [B] $y = -\frac{1}{2}x + 1$ [C] $x = 2$ [D] $y = \frac{1}{2}x + 1$

[96] _____

97. Round 625.365 to the nearest ten.

- [A] 640 [B] 620 [C] 625.4 [D] 630

[97] _____

98. Round 214.156 to the nearest ten.

- [A] 220 [B] 214.2 [C] 210 [D] 230

[98] _____

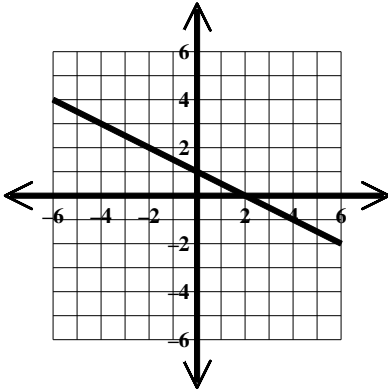
99. Round 545.677 to the nearest tenth.

- [A] 550 [B] 545.8 [C] 545.6 [D] 545.7

[99] _____

Name _____ Algebra I Summer

100. Which of these equations is shown on the graph?



[A] $y = -\frac{1}{2}x + 1$ [B] $y = 2$

[C] $x = 2$

[D] $y = -\frac{1}{2}x - 1$

[100] _____