

Math Connections Worksheets

MAT0018C Developmental Math I

Chapter 2

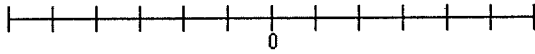
Integers and

Introduction to Solving Equations

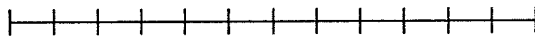
2.1 Introduction to Integers

Graphing Integers

1. Graph the following numbers of the number line below: 0, -6, 2 and



2. Graph the following numbers on the number line below: 1, -2, -4



Fill in the blank with one of the following symbols: $<$, $>$ or $=$

3. $-1 \square 2$

5. $0 \square -12$

4. $-7 \square -8$

6. $-100 \square 99$

Evaluate

7. $|-4|$

10. $|12|$

8. $|5|$

11. $|-33|$

9. $|0|$

12. $|-10|$

Find the Opposite

13. 14

16. 24

14. -3

17. -4

15. 0

18. -6

Simplify

19. $-(-4)$

23. $-(-20)$

20. $-|-14|$

24. $-|12|$

21. $-|6|$

25. $-(-5)$

22. $|-4|$

26. $|40|$

2.2 Adding Integers**Add**

27. $4 + 6$

28. $-5 + (-20)$

29. $-45 + (-16)$

30. $33 + (-4)$

31. $-16 + 5$

32. $6 + (-7)$

33. $-4 + 5$

34. $-4 + 5 + (-6) + 3$

35. $-6 + 4 + (-2)$

36. $4 + (-3) + 2$

37. $-15 + (-3) + 16$

38. $-2 + (-6) + 4 + (-6)$

Evaluate the Following Expressions for $x = 2$ and $y = -3$

39. $2x + y$

40. $x + y$

2.3 Subtracting Integers

41. $8 - 4$

42. $3 - 2$

43. $-7 - 5$

44. $-6 - 2$

45. $9 - (-2)$

46. $6 - 8$

47. $-11 - (-3)$

48. $-10 - (-12)$

49. $-4 - 3$

50. $7 - 8 - 4 - 1$

51. $-3 - (-2) + 4 - 1$

52. $-1 - (-2) + (-3) - (-4) + (-5)$

Evaluate the following expression given $x = -2$, $y = 3$, $z = -4$

53. $3y - x$

54. $x - z$

55. $x + z$

56. $x + y + z$

2.4 Multiplying and Dividing Integers**Multiply**

57. $(-3)(-2)$

58. $(4)(5)$

59. $-3(6)$

60. $4(-4)$

61. $-11(0)$

62. $-4(4)$

63. $-1(-5)$

64. $(3)(-2)(-8)$

65. $4(0)(-3)(-11)$

66. $-3(4)(-3)$

67. $(-4)(-4)(-2)(-1)$

Evaluate

68. -3^2

69. $(-3)^2$

70. $(-2)^3$

71. $(-1)^6$

72. $(-1)^7$

73. -6^2

Divide

74. $-25 \div 5$

75. $\frac{-99}{-11}$

76. $\frac{-24}{12}$

77. $36 \div (-6)$

78. $\frac{-4}{0}$

79. $\frac{0}{12}$

Evaluate the following expression given $x = -2$, $y = 3$, $z = -4$

80. xy

81. $\frac{z}{x}$

82. zy

83. xz

2.5 Order of Operations

84. $\frac{-4(3)}{-2}$

85. $6^2 - (-3)$

86. $|4 - 3| + |5 - 4|$

87. $2 \cdot 3^2 - 20$

88. $3(-2) - 5(2)$

89. $\frac{-16-2}{-1}$

Evaluate the following expression given $x = -3$, $y = 4$, $z = -8$

90. $2x - y$

91. $\frac{3y}{x}$

92. $x^2 - y^2$

93. $3x - 2y - 2z$

2.6 Solving Equations

Determine if the given number is a solution to the given equation

94. *Is 4 a solution to the $x - 5 = 2$?*

95. *Is -3 a solution to $y + 2 = -1$?*

96. *Is 9 a solution to the $x - 5 = 4$?*

97. *Is -3 a solution to the $x - 6 = 9$?*

98. *Is -2 a solution to the $x - 5 = -7$?*

99. *Is 2 a solution to the $2x + 5 = 8$?*

Solve

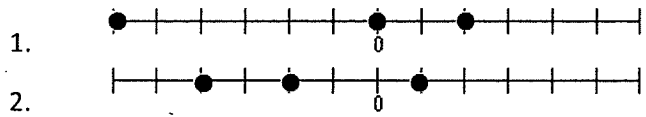
100. $x + 5 = 5$

102. $4s = 12$

101. $y - 6 = 10$

103. $\frac{x}{5} = 20$

Chapter 2



- | | | |
|---------|---------|----------------------|
| 3. < | 40. -1 | 77. -6 |
| 4. > | 41. 4 | 78. <i>Undefined</i> |
| 5. > | 42. 1 | 79. 0 |
| 6. < | 43. -12 | 80. -6 |
| 7. 4 | 44. -8 | 81. -2 |
| 8. 5 | 45. 11 | 82. -12 |
| 9. 0 | 46. -2 | 83. 8 |
| 10. 12 | 47. -8 | 84. 6 |
| 11. 33 | 48. 2 | 85. 39 |
| 12. 10 | 49. -7 | 86. 2 |
| 13. -14 | 50. -6 | 87. -2 |
| 14. 3 | 51. 2 | 88. -16 |
| 15. 0 | 52. -3 | 89. 18 |
| 16. -24 | 53. 11 | 90. -10 |
| 17. 4 | 54. 2 | 91. -4 |
| 18. 6 | 55. -6 | 92. -7 |
| 19. 4 | 56. -3 | 93. -1 |
| 20. -14 | 57. 6 | 94. <i>No</i> |
| 21. -6 | 58. 20 | 95. <i>Yes</i> |
| 22. 4 | 59. -18 | 96. <i>Yes</i> |
| 23. 20 | 60. -16 | 97. <i>No</i> |
| 24. -12 | 61. 0 | 98. <i>Yes</i> |
| 25. 5 | 62. -16 | 99. <i>No</i> |
| 26. 40 | 63. 5 | 100. $x = 0$ |
| 27. 10 | 64. 48 | 101. $y = 16$ |
| 28. -25 | 65. 0 | 102. $s = 3$ |
| 29. -61 | 66. 36 | 103. $x = 100$ |
| 30. 29 | 67. 32 | |
| 31. -11 | 68. -9 | |
| 32. -1 | 69. 9 | |
| 33. 1 | 70. -8 | |
| 34. -2 | 71. 1 | |
| 35. -4 | 72. -1 | |
| 36. 3 | 73. -36 | |
| 37. -2 | 74. -5 | |
| 38. -10 | 75. 9 | |
| 39. 1 | 76. -2 | |