

# **Math Connections Worksheets**

MAT0018C Developmental Math I

## **Chapter 5**

Decimals



## 5.1 Introduction to Decimals

**Determine what number occupies the given place value.**

1. Hundredths place: 54.2016
2. Thousands place: 1837.6259
3. Tenths place: 62.18
4. Ten-thousandths place: 97,531.86423

**Determine what place value the number occupies.**

5. 3.14159265 ; 9
6. 62.0175 ; 7
7. 4853.2179 ; 5
8. 86.1347 ; 3

**Convert the following decimal numbers into words.**

9. 5.78
10. .6289
11. 48.962
12. 13.8

**Write the following numbers in standard form.**

13. Twelve and thirteen hundredths
14. Ten and fifty-seven thousandths
15. Sixty-eight thousandths
16. Six and four hundred five thousandths.

**Convert the following decimals into fractions**

17. 0.125
18. 0.3
19. 0.48
20. 3.02
21. 4.25
22. 0.655

**Compare the following by filling in the blanks with one of the following:  $<$ ,  $>$ ,  $=$**

23. 49.658  49.660
24. 1.6001  1.5999
25. 0.1287  .1278
26. 127.60  127.6

**Round the following decimals to the indicated place value**

27. 4.678 ; hundredths place
28. 2.095 ; tenths place
29. 0.00985 ; thousandths place
30. 9.98 ; tenths place

## Chapter 5

## 5.2 Adding and Subtracting Decimals

Add or Subtract the Following

31.  $3.6 + 2.3$

32.  $4.56 + 2.3$

33.  $4.62 + 3.52$

34.  $-4.63 + (-4.42)$

35.  $32.5 + 24.1 + 61.3$

36.  $3 - 1.362$

37.  $4.6 - 2.1$

38.  $3 + 0.04$

39.  $200 - 3.02$

40.  $-2.6 - 5.3$

Evaluate the following expression for  $x = 2.1$ ;  $y = 4$ ;  $z = -0.32$ 

41.  $x + z$

42.  $x + y$

43.  $y - z$

44.  $x + y + z$

45.  $y - x$

46.  $x - y + z$

## 5.3 Multiplying Decimals

Multiply

47.  $0.32(3)$

48.  $(-2.6)(3.1)$

49.  $0.023(0.2)$

50.  $-3.6(-4.8)$

51.  $(0.2)(0.2)$

52.  $-6.3(1000)$

53.  $4.6(0.01)$

54.  $(3.31)(100)$

55.  $4.621(10000)$

56.  $(0.04)(0.001)$

Evaluate the following expression for  $x = 2.1$ ;  $y = 4$ ;  $z = -0.32$ 

57.  $xy$

58.  $yz$

59.  $xz - y$

60.  $-3z + x$

**5.4 Dividing Decimals****Divide**

61.  $5 \overline{)1.2}$

62.  $2.16 \div 0.6$

63.  $0.7 \overline{)3.43}$

64.  $15 \div -0.09$

65.  $-0.15 \div -0.6$

66.  $5 \div .05$

67.  $-3.6 \div 100$

68.  $0.3 \div 10$

69.  $3 \overline{)3.27}$

70.  $0.352 \div 4$

**5.5 Fractions, Decimals, and Order of Operations**

Write the following fractions as decimals

71.  $\frac{2}{5}$

74.  $\frac{3}{4}$

72.  $-\frac{3}{8}$

75.  $-\frac{5}{9}$

73.  $\frac{1}{20}$

76.  $\frac{1}{3}$

Compare the following by filling in the blanks with one of the following:  $<$ ,  $>$ ,  $=$

77.  $0.\bar{7} \square \frac{7}{10}$

79.  $0.4 \square \frac{2}{5}$

78.  $\frac{7}{8} \square 0.885$

80.  $-0.3 \square -\frac{1}{3}$

Simplify Each Expression

81.  $(0.1)^2(5 - 35)$

85.  $\frac{9(1-0.84)}{0.4^2(1-0.1)}$

82.  $(2 - 0.9)^2 + 2.1$

86.  $|1.3^2 - 2| - |3.9 - (6 \div 10)|$

83.  $2.7 \div 9 \cdot 0.3 \div 0.09$

87.  $1.8 \div 0.9 + 3.6 \cdot 2 \div 0.13$

84.  $3.7 - 0.7(1.6 - 3.2)$

88.  $1.6 - 2.3 + 2.7 - 5.8$

**5.6 Equations Containing Decimals.****Solve**

89.  $a + 1.3 = 2.6$

90.  $b + 3.24 = 6.24$

91.  $c - 0.6 = 5.06$

92.  $6d = 2.46$

93.  $3.1e = 0.62$

94.  $-0.1f = 6.5$

95.  $-0.35g + 0.28 = -1.12$

96.  $5(h + 1.3) = 15.5$

97.  $0.8z - 0.6 = 1$

98.  $4(y - 0.02) = 5y$

1. 0	33. 8.14	74. 0.75
2. 1	34. $-9.05$	75. $-0.\bar{5}$
3. 1	35. 117.9	76. $0.\bar{3}$
4. 2	36. 1.638	77. $>$
5. Hundred thousandths	37. 2.5	78. $<$
6. Thousandths	38. 3.04	79. $=$
7. Tens	39. 196.98	80. $>$
8. Hundredths	40. $-7.9$	81. $-0.3$
9. Five and seventy- eight hundredths	41. 1.78	82. 3.31
10. Six thousand, two hundred, eighty-nine ten thousandths.	42. 6.1	83. 1
11. Forty-eight and nine hundred sixty-two thousandths.	43. 4.32	84. 3.812
12. Thirteen and eight tenths	44. 5.78	85. 10
13. 12.13	45. 1.9	86. 2.99
14. 10.057	46. 1.58	87. 62
15. 0.0068	47. 0.96	88. $-3.8$
16. 6.405	48. $-8.06$	89. $a = 1.3$
17. $\frac{1}{8}$	49. 0.0046	90. $b = 3$
18. $\frac{3}{10}$	50. 17.28	91. $c = 5.12$
19. $\frac{12}{25}$	51. 0.04	92. $d = 0.41$
20. $\frac{151}{50}$ or $3\frac{1}{50}$	52. $-6300$	93. $e = 0.2$
21. $\frac{17}{4}$ or $4\frac{1}{4}$	53. 0.046	94. $f = -65$
22. $\frac{1311}{2000}$	54. 331	95. $g = 4$
23. $<$	55. 46,210	96. $h = 1.8$
24. $>$	56. 0.00004	97. $z = 2$
25. $>$	57. 8.4	98. $y = -0.08$
26. $=$	58. $-1.28$	
27. 4.68	59. $-4.672$	
28. 2.1	60. 11.7	
29. 0.010	61. 0.24	
30. 10.0	62. 3.6	
31. 5.9	63. 4.9	
32. 6.86	64. $-166.\bar{6}$	
	65. 0.25	
	66. 100	
	67. $-0.036$	
	68. 0.03	
	69. 1.09	
	70. 0.088	
	71. 0.4	
	72. $-0.375$	
	73. 0.05	