

# **Math Connections Worksheets**

MAT0018C Developmental Math I

## **Chapter 1**

The Whole Numbers



## 1.2 Place value and Names for numbers

**Find the place value of the digit 7 in each whole number.**

- |              |            |
|--------------|------------|
| 1. 4,736     | 4. 617,341 |
| 2. 4,072     | 5. 714,321 |
| 3. 1,574,694 | 6. 147     |

**Write the following numbers in words**

- |            |               |
|------------|---------------|
| 7. 17      | 10. 56,841    |
| 8. 14,631  | 11. 300,214   |
| 9. 648,142 | 12. 1,602,000 |

**Write the number in standard form**

- Forty-five thousand six hundred forty-five
- One million three hundred sixty-seven thousand four hundred fifty-two
- Seventy-three million fifteen
- Ten thousand eleven

**Write the numbers in expanded form**

- 54,025
- 638,412
- 480,001,604

**1.3 Adding and Subtracting Whole numbers, and Perimeter**

**State the property shown in the following examples**

20.  $4 + 3 = 3 + 4$

22.  $5 + (7 + 0) = 5 + 7$

21.  $4 + (3 + 6) = (4 + 3) + 6$

23.  $(4 + 6) + 1 = 1 + (4 + 6)$

**Add**

24.  $15 + 32$

27.  $481 + 66345$

25.  $148 + 67$

28.  $99 + 101$

26.  $12 + 15 + 62$

**Subtract**

29.  $64 - 23$

32.  $3000 - 482$

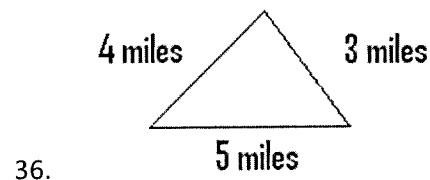
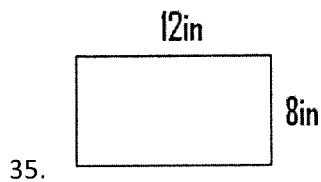
30.  $602 - 341$

33.  $411 - 384$

31.  $296 - 25$

34.  $628 - 214$

**Find the perimeter.**



## 1.4 Rounding and Estimating

### Rounding whole numbers

37. Round the 154 to the nearest ten.
38. Round the 154 to the nearest hundred
39. Round the 186,400 to the nearest ten-thousand.
40. Round 19 to the nearest ten.
41. Round 99,471 to the nearest thousand.
42. Round 597 to the nearest ten.

### Estimate by rounding

43. Estimate the following sum by rounding to the nearest hundred.

$$399 + 1493$$

44. Estimate the following sum by rounding to the nearest hundred.

$$150 + 99 + 981$$

45. Estimate the following difference by rounding to the nearest ten.

$$1947 - 147$$

46. Estimate the following difference by rounding to the nearest hundred.

$$4498 - 358$$

47. Estimate the following product by rounding as to the nearest hundred.

$$987 \times 395$$

48. Estimate the following product by rounding to the nearest thousand.

$$5167 \times 999$$

49. Estimate the following quotient by rounding to the nearest ten.

$$1399 \div 69$$

50. Estimate the following quotient by rounding to the nearest ten

$$95 \div 19$$

**1.5 Multiplying Whole Numbers and Area**

State the property shown in the following examples

51.  $5 \cdot 0 = 0$

54.  $6(3 \cdot 4) = (6 \cdot 3)4$

52.  $1 \cdot 4 = 4$

55.  $4(2 + 3) = 4 \cdot 2 + 4 \cdot 3$

53.  $9 \cdot 2 = 2 \cdot 9$

56.  $5(4 + 2) = (4 + 2)5$

**Multiply**

57.  $46 \times 7$

60.  $2(342)$

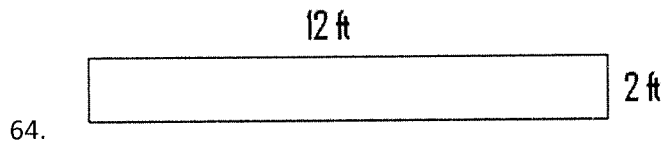
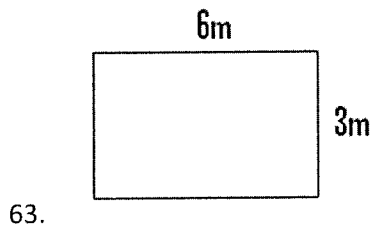
58.  $53 \cdot 12$

61.  $(140)(80)$

59.  $84 \cdot 103$

62.  $(600)(700)$

Find the area of the rectangles



## 1.6 Dividing Whole Numbers

### Dividing Whole Numbers

65.  $7 \overline{)21}$

66.  $187 \div 3$

67.  $4 \overline{)848}$

68.  $66 \div 2$

69.  $11 \overline{)154}$

70.  $1452 \div 7$

71.  $72840 \div 6$

72.  $156 \div 0$

73.  $0 \div 14$

74.  $0 \overline{)23}$

## 1.7 Exponents and Order of Operations

**Write the following in exponential notation**

75.  $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$

76.  $11 \cdot 11 \cdot 11 \cdot 11 \cdot 11 \cdot 11 \cdot 11$

77.  $4 \cdot 4 \cdot 4 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$

78.  $6 \cdot 2 \cdot 2 \cdot 2$

79.  $5 \cdot 5 \cdot 5 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

**Evaluate the following exponential notation**

80.  $8^2$

83.  $1^{10}$

81.  $2^7$

84.  $10^1$

82.  $3^3$

85.  $5 \cdot 2^3$

**Order of operations**

86.  $16 + 4 \cdot 2$

91.  $6^2 - [4 - (3 - 2)]$

87.  $28 \div 7 \cdot 2 + 1$

92.  $(16 \div 8) + [(4 + 3) \cdot 5]$

88.  $\frac{4 - 3 \cdot 1}{2 - 8 \div 4}$

93.  $48 - [25 - (3 + 4) \cdot 3]$

89.  $(7 + 5)^2 - 4$

94.  $\frac{9^2 + 2^3 - 1^4}{8 \div 2 \cdot 3 \div 12 \cdot 11}$

90.  $3 \cdot 2 - 4 + 5$



## 1.8 Intro to variables Algebraic expressions and equations

Evaluate the following expressions for  $x = 2$ ,  $y = 5$ , and  $z = 3$

95.  $3 + 2y$

98.  $8 - (y - z)$

96.  $6 - 3x$

99.  $2x^2 - 3x + 3$

97.  $x^4 - 3y$

100.  $\frac{5x+2}{2z}$

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

101. Is 13 a solution to  $15 - x = 2$ ?

102. Is 3 a solution to  $3n - 2 = 8$ ?

103. Is 14 a solution to  $2(x - 7) = 14$ ?

104. Is 5 a solution to  $3y - 2 = 4y - 7$ ?

105. Is 2 a solution to  $3d + 1 = 3(d + 1)$ ?

Translate the following phrases into variable expressions

106. Six more than a number

107. The difference of eight and a number

108. The product of a number and nine

109. The sum of twice a number and six

110. The quotient of a number and 5

## Chapter 1

- |   |  |                     |
|---|--|---------------------|
| 1. Hundreds   | 32. 2518                                   | 70. 207R3           |
| 2. Tens   | 33. 27                                     | 71. 12,140          |
| 3. Ten Thousands  | 34. 414                                    | 72. Undefined       |
| 4. Thousands  | 35. 40 in.                                 | 73. 0               |
| 5. Hundred Thousands                                      | 36. 12 miles                               | 74. Undefined       |
| 6. Ones   | 37. 150                                    | 75. $3^8$           |
| 7. Seventeen  | 38. 200                                    | 76. $11^7$          |
| 8. Fourteen thousand six hundred thirty-one               | 39. 190,000                                | 77. $4^3 \cdot 3^5$ |
| 9. Six hundred forty-eight thousand one hundred forty-two | 40. 20                                     | 78. $6 \cdot 2^3$   |
| 10. Fifty-six thousand eight hundred forty-one            | 41. 99,000                                 | 79. $5^3 \cdot 2^4$ |
| 11. Three hundred thousand two hundred fourteen           | 42. 600                                    | 80. 64              |
| 12. One million six hundred two thousand                  | 43. 1900                                   | 81. 128             |
| 13. 45,645  | 44. 1300                                   | 82. 27              |
| 14. 1,367,452   | 45. 1800                                   | 83. 1               |
| 15. 73,000,015  | 46. 4100                                   | 84. 10              |
| 16. 10,011  | 47. 400,000                                | 85. 40              |
| 17. $50,000 + 4,000 + 20 + 5$                             | 48. 5,000,000                              | 86. 24              |
| 18. $600,000 + 30,000 + 8,000 + 400 + 10 + 2$             | 49. 20                                     | 87. 9               |
| 19. $400,000,000 + 80,000,000 + 1000 + 600 + 4$           | 50. 5                                      | 88. Undefined       |
| 20. Commutative Property of Addition                      | 51. Multiplication Property of Zero        | 89. 140             |
| 21. Associative Property of Addition                      | 52. Multiplication Property of One         | 90. 7               |
| 22. Addition Property of Zero                             | 53. Commutative Property of Multiplication | 91. 33              |
| 23. Commutative Property of Addition                      | 54. Associative Property of Multiplication | 92. 37              |
| 24. 47  | 55. Distributive Property                  | 93. 44              |
| 25. 215   | 56. Commutative Property of Multiplication | 94. 8               |
| 26. 89  | 57. 322                                    | 95. 13              |
| 27. 66,826  | 58. 636                                    | 96. 0               |
| 28. 200   | 59. 8652                                   | 97. 1               |
| 29. 41  | 60. 684                                    | 98. 6               |
| 30. 261   | 61. 11,200                                 | 99. 5               |
| 31. 271   | 62. 420,000                                | 100. 2              |
|   | 63. 18 sq meters                           | 101. Yes            |
|   | 64. 24 sq ft                               | 102. No             |
|   | 65. 3                                      | 103. Yes            |
|   | 66. 62R1                                   | 104. Yes            |
|   | 67. 212                                    | 105. No             |
|   | 68. 33                                     | 106. $x + 6$        |
|   | 69. 14                                     | 107. $8 - n$        |
|   |  | 108. $q \cdot 9$    |
|   |  | 109. $2x + 6$       |
|   |  | 110. $\frac{n}{5}$  |