Whole Numbers
CHAPTER 1

1. Which of the following are ways that numbers may be correctly expressed? ***Select all that apply.***
   1. Inverse
   2. Rational
   3. Decimals
   4. Proper
   5. Fractions

2. Place the mathematical operations in the correct order they should be performed:
   1. Perform the operations that require adding or subtracting, starting from left to right.
   2. Perform the operations that are inside the parentheses first.
   3. Perform the operations that require multiplying or dividing, starting from left to right.

3. Which numbers are considered whole numbers? ***Select all that apply.***
   1. 10,000
   2. −20
   3. 0
   4. 7
   5. 3/5

4. Which signs indicate that a division operation should be performed? ***Select all that apply.***
   1. ×
   2. /
   3. *
   4. ÷
   5. -

5. Which of the following is true regarding the order of mathematical operations?
   1. Perform operations that are inside parentheses first.
   2. Perform operations that require multiplying or dividing, starting from right to left.
   3. Perform operations that require adding or subtracting before multiplying or dividing.
   4. Perform operations that are inside parentheses last.

6. For the number 2,875,634, which number is in the hundreds place?
   1. 2
   2. 8
   3. 6
   4. 4

Calculate the following equations.

7. 6,157 + 816 = _____

8. 8,153,757 + 4,514 = _____

9. 845 – 627 = _____

10. 48,685 – 7,526 = _____

11. 84 × 75 = _____

12. 16 × 8 = _____

13. 16 ÷ 4 = _____

14. 21 ÷ 7 = _____

15. 27 ÷ 3 = _____

Whole Numbers
CHAPTER 1

1. Which of the following are ways that numbers may be correctly expressed? ***Select all that apply.***
   1. Inverse
   2. Rational
   3. Decimals
   4. Proper
   5. Fractions

   ANS: 2, 3, 5
   Rationale: Numbers may be expressed as integers, rational or irrational numbers, real numbers, fractions, decimals, whole numbers, or factors.

2. Place the mathematical operations in the correct order they should be performed:
   1. Perform the operations that require adding or subtracting, starting from left to right.
   2. Perform the operations that are inside the parentheses first.
   3. Perform the operations that require multiplying or dividing, starting from left to right.

   ANS: 2, 3, 1
   Rationale: This is the correct order for performing mathematical operations. See Box 1-3 in text.

3. Which numbers are considered whole numbers? ***Select all that apply.***
   1. 10,000
   2. −20
   3. 0
   4. 7
   5. 3/5

   ANS: 1, 3, 4
   Rationale: Whole numbers are called *natural numbers* or *counting numbers*. They include 0 and all positive numbers such as 1, 2, 3, 4 and so on.

4. Which signs indicate that a division operation should be performed? ***Select all that apply.***
   1. ×
   2. /
   3. *
   4. ÷
   5. -

   ANS: 2, 4
   Rationale: These symbols are indications that a division operation should be performed. The other symbols listed are for multiplication and subtraction.

5. Which of the following is true regarding the order of mathematical operations?
    1. Perform operations that are inside parentheses first.
    2. Perform operations that require multiplying or dividing, starting from right to left.
    3. Perform operations that require adding or subtracting before multiplying or dividing.
    4. Perform operations that are inside parentheses last.

    ANS: 1

    Rationale: The order of mathematical operations is as follows:
    1) Perform operations that are inside the parentheses first.
    2) Perform the operations that require multiplying or dividing first, starting from left to right.
    3) Perform the operations that require adding or subtracting next, starting from left to right.

6. For the number 2,875,634, which number is in the hundreds place?
    1. 2
    2. 8
    3. 6
    4. 4

    ANS: 3

    Rationale: The place values of the number 2,875,634 from left to right are as follows: millions (2), hundred thousands (8), ten thousands (7), thousands (5), hundreds (6), tens (3), and ones (4).

7. 6,157 + 816 = _____

    ANS: 6,973

    Rationale:

    $$\begin{array}{r} {\scriptstyle 1} \\ 6157 \\ +\ 816 \\ \hline 6973 \end{array}$$

8. 8,153,757 + 4,514 = _____

    ANS: 8,158,271

    Rationale:

    $$\begin{array}{r} {\scriptstyle 1\ \ 1} \\ 8153757 \\ +\ \ \ \ 4514 \\ \hline 8158271 \end{array}$$

9. 845 – 627 = _____
    ANS: 218
    Rationale:

    $$
    \begin{array}{r}
    {\scriptstyle 31} \\
    8\cancel{4}5 \\
    -\ 627 \\
    \hline
    218
    \end{array}
    $$

10. 48,685 – 7,526 = _____
    ANS: 41,159
    Rationale:

    $$
    \begin{array}{r}
    {\scriptstyle 71} \\
    486\cancel{8}5 \\
    -\ 7526 \\
    \hline
    41159
    \end{array}
    $$

11. 84 × 75 = _____
    ANS: 6,300
    Rationale:

    $$
    \begin{array}{r}
    2 \\
    2 \\
    84 \\
    \times\ 75 \\
    \hline
    1 \\
    1420 \\
    5880 \\
    \hline
    6300
    \end{array}
    $$

12. 16 × 8 = _____
    ANS: 128
    Rationale:

    $$
    \begin{array}{r}
    4 \\
    16 \\
    \times\ 8 \\
    \hline
    128
    \end{array}
    $$

13. 16 ÷ 4 = _____

    ANS: 4

    Rationale:

$$4\overline{)16} \;\; ^{4}$$

14. 21 ÷ 7 = _____

    ANS: 3

    Rationale:

$$7\overline{)21} \;\; ^{3}$$

15. 27 ÷ 3 = _____

    ANS: 9

    Rationale:

$$3\overline{)27} \;\; ^{9}$$