

## LESSON 1.1 PRACTICE

# Using Numerical Expressions

**Directions:** Complete the problems below.

1. Add in parentheses and brackets to make the equation true.

$$6 \div 2 \ 8 \times 4 \times 5 + 3 = 768$$

2. Add in parentheses, brackets, and braces to make the equation true.

$$3 \times 4 + 6 - 10 + 6 \times 24 - 19 = 50$$

3. Add in parentheses to make the equation true.

$$21 - \frac{8}{9} + \frac{2}{5} = 19\frac{32}{45}$$

4. Add in parentheses, brackets, and braces to make the equation true.

$$10^2 \times 7 - 4 + 6 \div 50 = 14\frac{1}{25}$$

5. What is the difference between the solutions if the following expression is grouped and solved in two different ways?

$$13 - 4 + 5$$

6. Mary was asked to solve for the variable  $n$ . Sam told her that the variable had to represent a part of a whole.

$$\left\{ \left[ (27 \times 12) + 4 \right] \div 2 \right\} \times n = 82$$

- a. Do you agree? Why or why not?

b. Solve for the variable  $n$ .

7. Solve for the variable  $y$ .

$$\left\{ \left[ 9 \times \left( 5 \times \frac{6}{7} \right) \right] + (19 \times y) \right\} = 95 \frac{4}{7}$$

### Extend Your Thinking

1. Create a number trick using symbols. For example, ask your partner to think of a two-digit number. Multiply the number in the tens place by 5. Now add 3. Next, ask your partner to double this number. Finally, have the person add the number in the ones place of his or her original two-digit number to the number and tell you the answer. Deduct 6 and you will have the original two-digit number. (More examples can be found at <http://www.learn-with-math-games.com/math-number-tricks.html>.)

**LESSON 1.1****Common Core Assessment Practice**

**Directions:** Complete the problems below.

1. Write the expression being described and then solve.

$$.67 \text{ times } 3 \text{ plus } 17$$

2. Describe the expression in word form and then solve.

$$29 + (56 \times 10)$$

3. Solve the expression.

$$4\{3+6+[7+(3 \times 10^3)]+5\}$$

- a. 12,084
- b. 40,056
- c. 12,042
- d. 40,650

4. Ricardo is studying expressions and says that adding 25 and 36 and then multiplying by 2 equates to multiplying 36 times 2 and then adding 25. Do you agree with Ricardo? Why or why not?