

Solving One-Step Equations  
and  
Writing Algebraic Expressions

Name \_\_\_\_\_  
Class \_\_\_\_\_  
Date \_\_\_\_\_

1. Which of the following makes the equation true?

$$7 = 13 - x$$

- [A]  $x = 6$                       [B]  $x = -20$                       [C]  $x = -6$                       [D]  $x = 20$

Solve:

2.  $16 = m + 7$

3.  $27 = m + 6$

4. In which equation does  $x = 14$ ?

- [A]  $x - 6 = 8$                       [B]  $10 - x = 4$                       [C]  $8 + x = 14$                       [D]  $x + 6 = 8$

5. Use tiles, mental math, or a calculator to solve the equation:

$$28.9 + x = 34.4$$

Solve:

6.  $24 = 3y$                       [A] 21                      [B] 27                      [C] 8                      [D] 7

7.  $4 = e \div 125$

8.  $468 = 52j$

9. Anita was selling Girl Scout cookies for the local Girl Scout Troop. Each box of cookies cost \$2.95. Mrs. Brown's purchase of Girl Scout cookies totaled \$14.75. Choose the equation to determine how many boxes of Girl Scout cookies were purchased by Mrs. Brown.

- [A]  $2.95(c) = 14.95$     [B]  $2.95 = 14.75(c)$     [C]  $2.95(14.75) = c$     [D]  $2.95 + c = 14.95$

10. Write an equation that has a solution of 12 and uses division to solve the equation.

11. Which variable expression below means the quotient of 5 times a number and 7?

- [A]  $7x \div 5$                       [B]  $12x \div 2$                       [C]  $5x \div 7$                       [D]  $2x \div 12$

12. Marcus is 12 years old. Arlene is 8 years old. Write a variable expression for Arlene's age using Marcus' age as  $M$ .

[A]  $M + 8$

[B]  $M + 4$

[C]  $M - 12$

[D]  $M - 4$

13. Write the word phrase that describes the expression.  $12v + 19$

[A] a number  $v$  increased by twelve

[B] twelve times a number  $v$  increased by nineteen

[C] a number  $v$  decreased by twelve

[D] twelve times a number  $v$  decreased by nineteen