

## Lesson 6 ~ Solving Multi-Step Equations

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Solve each equation and check your solution.

1.  $3(2x + 4) = 60$

2.  $5x + 1 = 8x - 23$

3.  $45 = 5(3x - 6)$

4.  $3(x + 2) = 4(x + 1)$

5.  $6 - 3x = 2x - 24$

6.  $7(2x - 3) = 7$

7.  $3x + 5 = 5(x - 3)$

8.  $4x + 17 = -2x + 23$

9.  $10x - 9 = -2x - 69$

10.  $15x = 12(x - 3)$

11.  $6x + 3 = 2x + 3$

12.  $5(x - 1) = 20(x - 10)$

13. Xavier spent \$84 on art supplies. The canvas for each of his paintings is an additional \$1. He plans to sell his paintings for \$8.

a. Write an equation that could be used to find the number of paintings ( $p$ ) he will need to sell to break even.

b. Solve the equation from **part a**. Check the solution.