Lesson 4.6 ~ Simplifying and Solving Equations

Name______ Period____ Date_____

Solve each equation for the variable. Show your work and check your solution.

1.
$$5x + 4x - 6x = 24$$

2.
$$8y + 5 - 4y + 1 = 46$$

3.
$$33 = 5(x+8) + 3$$

4.
$$2m+3(m-8)=1$$

5.
$$p + p - 2p + 4p = -48$$

6.
$$2(y+5)+3y=25$$

7.
$$\frac{1}{4}h + \frac{3}{4}h + \frac{1}{2}h + 2 = 5$$

8.
$$60 = 4(k+3) + 2(k-3)$$

9.
$$-2(d+1.4)-1.8=20.6$$

10.
$$8-2(w+4)=10$$

- 11. Tyler told his friend this riddle: "I am thinking of a number. Three times my number plus twice my number is twenty. What number am I thinking of?"
 - **a**. Write an equation that models Tyler's statement.
 - **b**. Solve the equation. What number was Tyler thinking of?