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?