Hints for solving multi step equations:

- **Use the Distributive Property if there are parentheses on ONE side of an equation.**
- **If there are like terms on ONE side of an equation, combine them.**
- **Finally, use the properties of equality to solve the equation.**

Example 1: Solve each multi-step equation. Justify each step with a reason.

a. $2(x - 3) = 8$ _____

_____ _____

_____ _____

_____ _____

b. $3x - 4x + 6 = -2$ _____

_____ _____

_____ _____

_____ _____

Example 2: Solve the equations by finding a common denominator first. Then use properties of equality to simplify.

a. $\dfrac{2x}{3} + \dfrac{x}{2} = 7$

b. $\dfrac{m}{4} + \dfrac{m}{2} = \dfrac{5}{8}$

Example 3: Solve each equation. Use the Addition or Subtraction Properties of Equality to GATHER VARIABLE TERMS on one side of the equation.

    a. $6x + 3 = 8x - 21$

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

Summary for Solving Equations:

Step 1	**Use the Distributive Property to remove parentheses.**
Step 2	**Gather and combine like terms on each side.**
Step 3	**Undo addition or subtraction.**
Step 4	**Undo multiplication or division.**

Homework: **Page 91 #12 – 15 all, 21 – 25 all, and page 98 # 3 – 15 odd**

        YOU MUST SHOW ALL WORK FOR FULL CREDIT!