Algebra I
Notes 4.6, Part 1 Solving Multi-Step Equations

Objective: Solve two-step equations with the variable on one side.

Example 1 Translate the equation $3x + 4 = 10$.

"An unknown number _____."

To solve for the unknown number "x" work backward from the order of operations.

Step 1. _____

Step 2. _____

x = _____ check: 3( ) + 4 = 10

Example 2 Translate the equation $\frac{x}{2} - 3 = 9$.

"An unknown number _____."

To solve for the unknown number "x" work backward from the order of operations.

Step 1. _____

Step 2. _____

x = _____ check: $\frac{\quad}{2} - 3 = 9$

To solve a 2-step equation, follow these steps (work backward from the order of operations):

Step 1. _____

Step 2. _____

Step 3. Box and check your solution.

Classroom Practice.

Solve the equations by first adding or subtracting from both sides of the equation then multiplying or dividing both sides of the equation. Show all steps. Box and check your solutions.

1. $6n + 8 = 50$

2. $12n - 4 = 68$

3. $5n + 15 = 60$

4. $9n - 16 = 92$

5. $3n + 13 = 46$

6. $7n + 5 = 110$

7. $13n + 14 = 40$

8. $4n - 30 = 46$

9. $15n + 15 = 30$