Name:_____ Hour: _____ Date: _____

NOTES: Sections 3.3 – Solving Two Step Equations

Goals: #1 – I can solve multi-step equations using addition, subtraction, multiplication, and division.

Homework: Two-Step Equation Maze

Warm Up:

1. Solve the following equations.

   a. $-0.5x = 6$ b. $-\frac{1}{3}h = \frac{2}{5}$ c. $y + \frac{2}{3} = -\frac{1}{6}$

Exploration #1:

1. What are *variable terms*?

2. What are *like terms*?

3. How do I multiply $2(x + 7)$?

Notes:

Solving linear equations may requrie more than _____ step.

Multi-step equations are like onions, they have many _____. We _____ each layer to _____ the variable.

Example: $4 = \frac{2(x+3)-8}{3}$ has a bunch of layers! We will come back to this problem ☺

Name:_____ Hour: _____ Date: _____

Example #1: Solve the following equations.

1. $3x + 7 = -8$

2. $7x - 3x - 8 = 24$

You practice: Solve the following equations.

1. $2y + 5 = 1$

2. $w - 4 + 5w = 14$

Name:_____ Hour: _____ Date: _____

Example #2: Solve the following equations.

1. $5x + 3(x + 4) = 28$

2. $8x - 2(x + 7) = 16$

3. $4 = \frac{2}{3}(x + 3)$

You practice: Solve the following equations.

1. $6(x + 2) = 15$
2. $8 - 4(x + 1) = 8$
3. $-9 = -\frac{3}{5}(x + 1)$

CHALLENGE: Solve the equation: $4 = \frac{2(x+3)-8}{3}$