**3.5/4.4 Solving Multi-Step Equations and Inequalities**

EQ: How do we use what we know about **One-Step** equations and inequalities to solve Multi-Step equations and inequalities?

STEP 1- **SIMPLIFY** using **DISTRIBUTIVE PROPERTY** and/or **COMBINING LIKE TERMS**

STEP 2- **UNDO the ADDITION/SUBTRACTION first**

STEP 3- **then, UNDO the MULTIPLICATION/DIVISION**

**EQUATIONS**

EX. 1 -3x + 5 = 2 EX. 2 $\frac{t}{4}$ - 7 = -15

EX. 3 3(x - 4) = 9 EX. 4 3y - 8y = 25

EX. 5 12.5 = 0.3m – 2.8m EX. 6 $\frac{x-5}{3}$ = -2

**INEQUALITIES**



**STEPS:** -Distribute (if needed)

-Combine like terms (if needed)

-**UNDO** addition/subtraction

-**UNDO** multiplication/division



On Your Own

1) 2*x* + 12 = 4 2) $\frac{m}{2}$ + 6 = 10

3) 4 – 2y + 3 = -9 4) 3(*x* − 4) = 9

5) - $\frac{z}{3}$ + 5 = 9 6) 7x – 10x = 15

7) −5*c* + 9 = −16 8) $\frac{2}{5}$ + 4a = -$\frac{6}{5}$

9) -8 = 1.3m – 2.1m 10) $\frac{4+ x}{6}$ = -3

