

# Today's Plan:

**Learning Target (standard):** I will solve multi-step equations.

**Students will:** Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

**Teacher will:** Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

**Assessment:** Board work, homework check and homework assignment

**Differentiation:** Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

## First Day Worksheet #1-18

1)  $m = 7$

2)  $m = -5$

3)  $n = 7$

4)  $b = -8$

5) no solution

6)  $m = 4$

7)  $n = -10$

8)  $a = -15$

9)  $(x - 5)(x - 8)$

10)  $(p - 6)(p - 8)$

11)  $(x + 9)^2$

12)  $(7a + 4)(a - 4)$

13)  $(2n + 5)(n - 2)$

14)  $(2r + 1)(r - 3)$

15)  $(3b - 4)(3b + 5)$

16)  $(x + 5)(10x + 1)$

17)  $(b + 2)(9b - 2)$

18)  $(x + 5)(4x + 7)$

Solve each equation.

1)  $-5(4b - 2) = -150$   
 $-20b + 10 = -150$   
 $-20b = -160$   
 $b = 8$

2)  $-140 = -5(4 - 4b)$   
 $-140 = -20 + 20b$   
 $-120 = 20b$   
 $b = -6$

3)  $2(p + 5) = -(2 - 3p)$   
 $2p + 10 = -2 + 3p$   
 $12 = p$

4)  $5(-5p - 5) = 3(2p + 2)$   
 $-25p - 25 = 6p + 6$   
 $-31p = 31$   
 $p = -1$

Factor each completely.

5)  $x^2 - 2x - 63$   
 $(x - 9)(x + 7)$

6)  $k^2 + 20k + 100$   
 $(k + 10)^2$

7)  $5v^2 + 22v + 21$   
 $(5v + 7)(v + 3)$

8)  $5a^2 + a$   
 $a(5a + 1)$

9)  $9a^2 + 89a + 72$   
 $(9a + 8)(a + 9)$

10)  $9p^2 - 83p + 18$   
 $(9p - 2)(p - 9)$

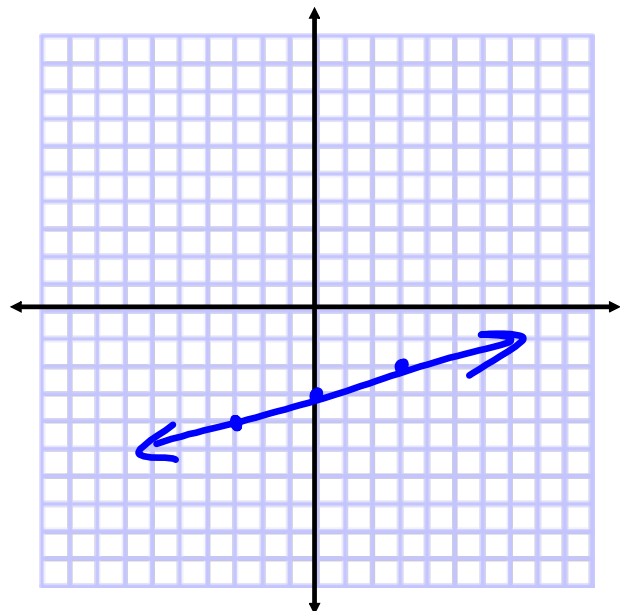
Graph using a t-chart.

$$2x - 6y = 18$$

$$-6y = -2x + 18$$

$$y = \frac{1}{3}x - 3$$

x	y
-3	-4
0	-3
3	-2



Graph using the slope-intercept method. Be sure to label the slope and y-intercept.

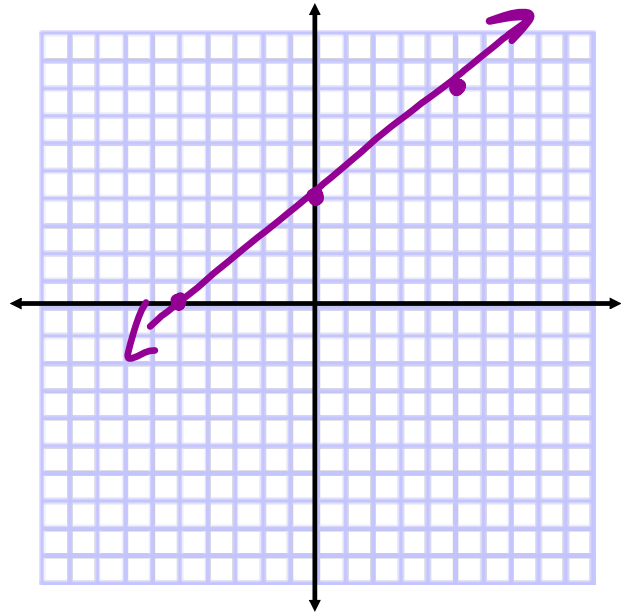
$$-4x + 5y = 20$$

$$5y = 4x + 20$$

$$y = \frac{4}{5}x + 4$$

$$m = \frac{4}{5}$$

$$I_y: (0, 4)$$



Describe the differences between:

"no solution"

• the value of an equation is undefined

$$3 \neq 4$$

$\emptyset$

"empty set"

• no solution to an inequality

$$3 > 4$$

Describe the differences between:

"identity"

• an equation is  
always true

$$2(x+4) = 2x+8$$

$\mathbb{R}$

• infinite solutions  
to an inequality

$$4 > -2$$

Assignment:

Second Day Practice

#1-16

\* Don't forget to submit in GC your Rules & Regulations before class tomorrow! \*