Warm Up! $y = mx + b$

SLOPE   Y-INTERCEPT

The NUMBER in front (coefficient) of the x is the SLOPE. The CONSTANT is the Y-INTERCEPT.

For each example, solve for y. Determine the **slope** and **y- intercept** of each equation.

1. $y = 2x + 8$

2. $\dfrac{3y}{3} = \dfrac{9x}{3} - \dfrac{6}{3}$

$y = 3x - 2$

3. $2y - 4x = 12$

$+4x \quad +4x$

$\dfrac{2y}{2} = \dfrac{4x}{2} + \dfrac{12}{2}$

$y = 2x + 6$

Slope __2__

y-intercept __8__

Slope __3__

y-intercept __-2__

Slope __2__

y-intercept __6__

SPRINT!!!

- Take 5 minutes to complete the sprint from the back of your packet

- Turn it in

- Open your packet to the page for writing corrections on the sprint

Review of Sprint

Name:_____ **Score**

Slope-Intercept Form Sprint   ____/10

Directions: INDEPENTENTLY solve each equation for y. (i.e. write in y=mx+b form)

1. $-3x + y = -5$ _____

2. $4x + y = 17$ _____

3. $-8x + 16y = -16$ _____

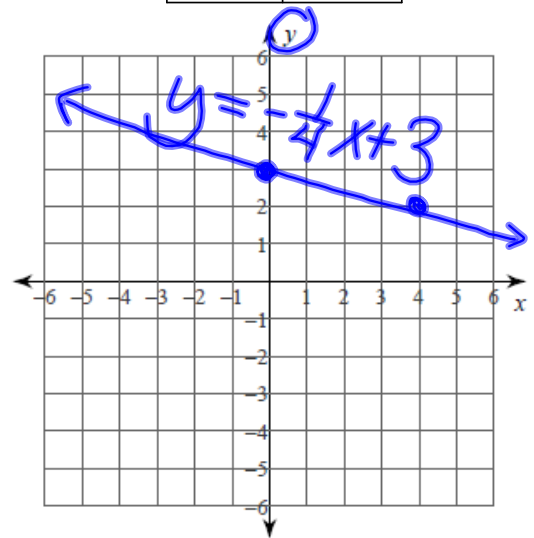4. $2y + 4x = -12$ _____

5. $x - y = 3$ _____

In each example below, solve for y then graph!

$$-2x - 8y = -24$$

$$+2x \qquad\qquad +2x$$

$$-8y = 2x - 24$$
$$\overline{-8} \quad \overline{-8} \quad \overline{-8}$$

$$y = -\tfrac{1}{4}x + 3$$

y-int: 3
Slope: $-\tfrac{1}{4}$ ↓ $\tfrac{1}{4}$ →

x	y

$\tfrac{2}{-8}$

$\tfrac{-24}{-8}$

$-\tfrac{1}{4}$

3

$$y = -\tfrac{1}{4}x + 3$$

In each example below, solve for y then graph!

$$-3x + 5y = 15$$

$$+3x \qquad +3x$$

$$\frac{5y}{5} = \frac{3x}{5} + \frac{15}{5}$$

$$y = \frac{3}{5}x + 3$$

x	y

$y = \frac{3}{5}x + 3$
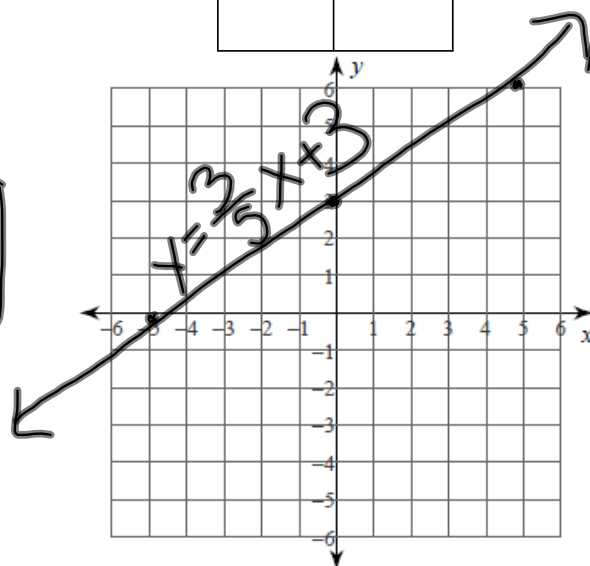
In each example below, solve for y then graph!

$$2x - 12y = 24$$

x	y
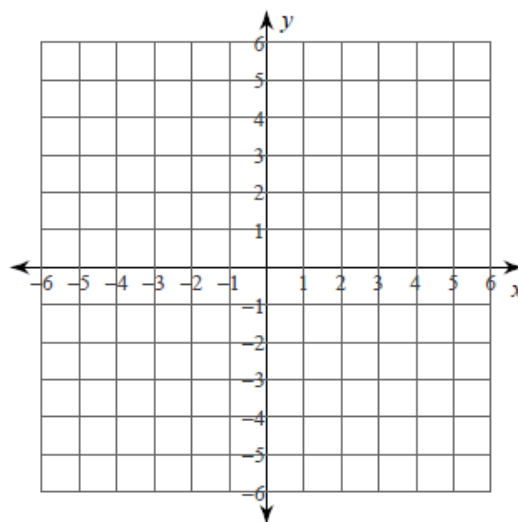
In each example below, solve for y then graph!

$$5x + 15y = -30$$

x	y
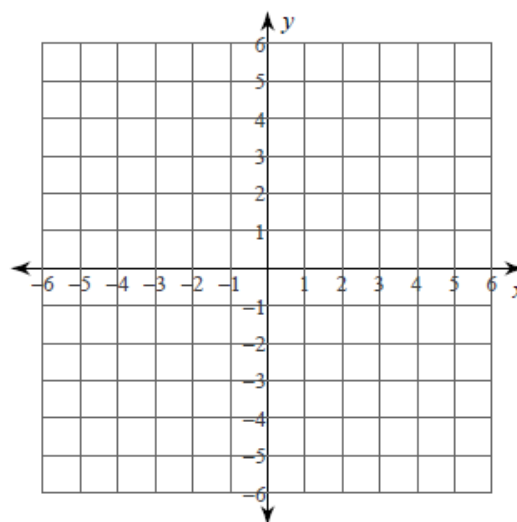
In each example below, solve for y then graph!

$$-6x + 4y = 24$$

x	y
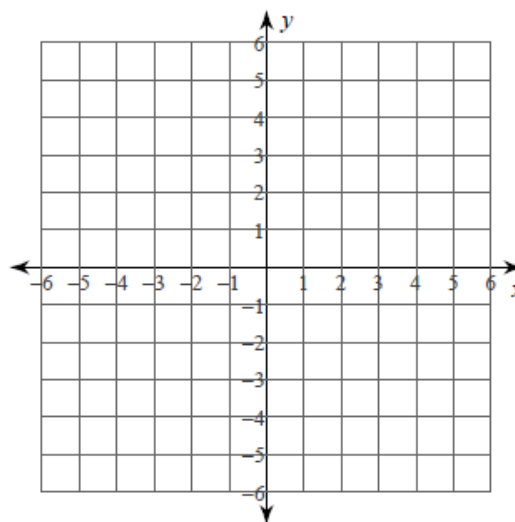
In each example below, solve for y then graph!

$$10x + 10y = -10$$

x	y