Use Intercepts to Graph Linear Equations Notes

Objective: Graph the equation of a line in both standard and slope-intercept form.

Change the equation into slope-intercept form, or find the x and y-intercepts, then graph.

<u>X-intercept</u> – Where the graph crosses the x-axis (y = 0)

Y-intercept – Where the graph crosses the y-axis (x = 0)

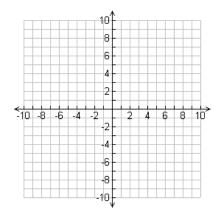
1a.
$$4x + y = 8$$
$$-4x - 4x$$
$$y = -4x + 8$$

$$4x + y = 8$$
 1b. $4x + y = 8$

X-intercept (
$$y = 0$$
) $4x + 0 = 8$

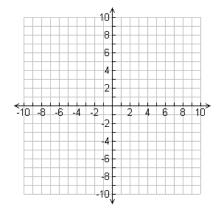
$$x = 2$$

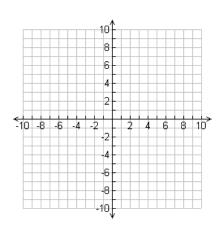
Y-intercept (
$$x = 0$$
) 4(0) + $y = 8$
 $y = 8$



2a.
$$-3x + 5y = 15$$

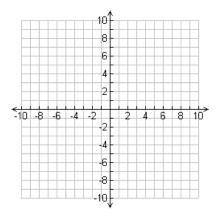
2b.
$$-3x + 5y = 15$$

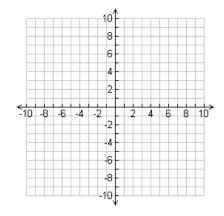




3.
$$5x - y = 4$$

4.
$$7y = 28$$





5.
$$x = -6$$

6.
$$9x - 6y = 54$$

