

Lesson #10

Graphing Equations in Slope-Intercept Form

A. Writing Equations in Slope-Intercept Form

Slope-Intercept Form - _____	
$m =$ _____	$b =$ _____
$x =$ _____	$y =$ _____

Write each equation in slope-intercept form.

1) $2x + 1 = y$

2) $-7x + y = -2$

3) $4x - y = -1$

4) $4x - y = -4$

5) $-x + 3y = -12$

6) $7x + 2y - 3 = 0$

B. Graphing Equations in slope-intercept form.

Step 1: Solve for y to get into slope-intercept form.

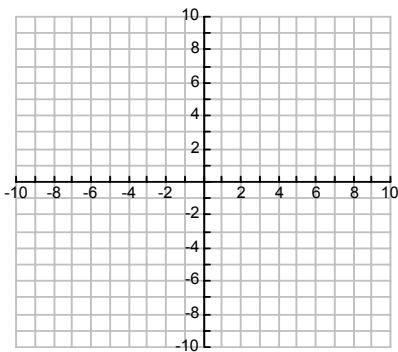
Step 2: Begin with "b". Locate the y -intercept on the y -axis

Step 3: Rise and Run. Use the slope to locate a second point.

Step 4: Draw the line through the two points.

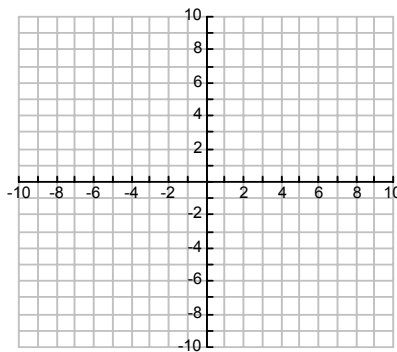
7) $y = \frac{2}{3}x + 1$

$m = \underline{\quad}$
 $b = \underline{\quad}$



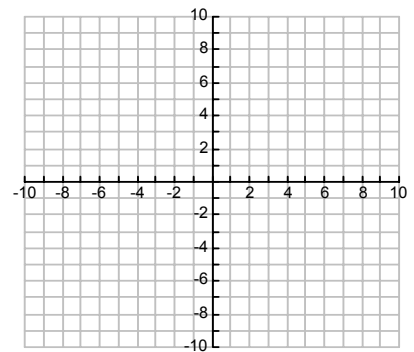
8) $y = \frac{3}{4}x - 2$

$m = \underline{\quad}$
 $b = \underline{\quad}$



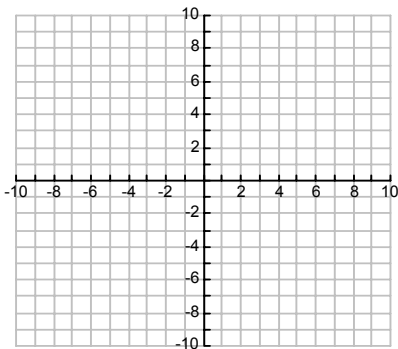
9) $y = 2x - 3$

$m = \underline{\quad}$
 $b = \underline{\quad}$



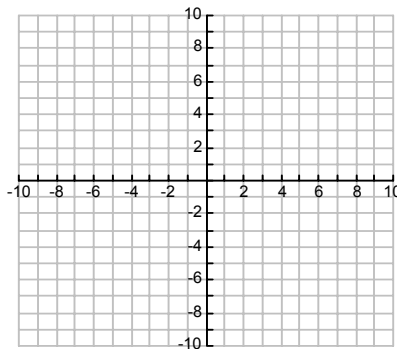
10) $2x - y = 1$

$m = \underline{\quad}$
 $b = \underline{\quad}$



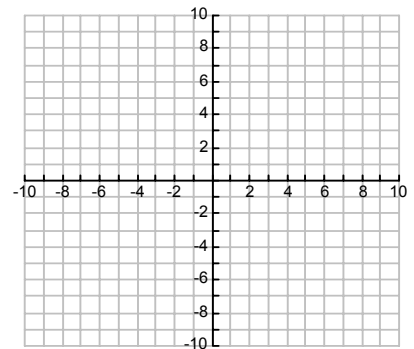
11) $x + 3y = 9$

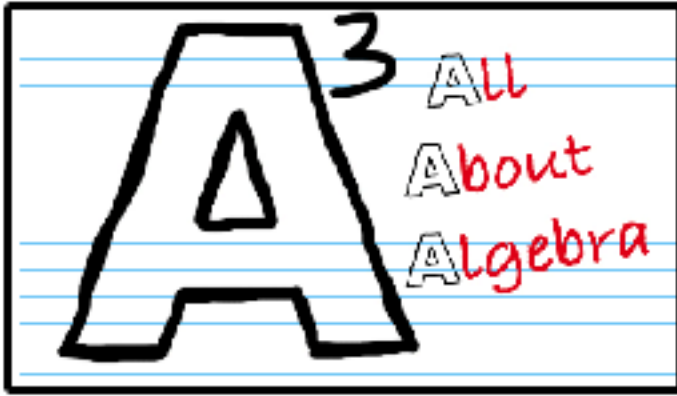
$m = \underline{\quad}$
 $b = \underline{\quad}$



12) $4x - 3y = 12$

$m = \underline{\quad}$
 $b = \underline{\quad}$





Just for Fun!

Parachuting

You are parachuting. At time $t = 0$ seconds, you open your parachute at height $h = 2500$ feet above the ground. At time $t = 35$ seconds, you are at height $h = 2115$ feet.

- What is your rate of change in height?
- How many seconds will it take you to reach the ground?