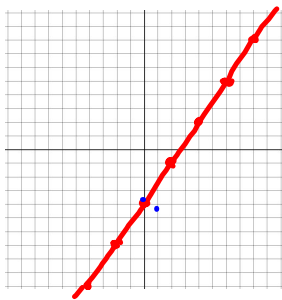


Warm-Up

Graph

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



$$\frac{2}{-5} = -0.4$$

"2nd PRB"
ANS F → D
ENTER

(5, 4)

SLOPE IS ALWAYS }
A FRACTION }

$$y = mx + b$$

$$4 = \frac{-2}{5} \cdot \frac{5}{1} + b$$

$$4 = \frac{-2}{5} + b$$

$$6 = b$$

$$y = \frac{-2}{5}x + 6$$

Find Slope and write the equation

b) (20, -2) (5, 4)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - (-2)}{5 - 20} = \frac{6}{-15}$$

-0.4

$$\frac{6 \div 3}{-15 \div 3} = \frac{2}{-5}$$

rise
run

Standard Form

Used to find x-intercepts and y-intercepts

$Ax + By = C$ where A, B, C are numbers (whole)

Ex 1 Find the intercepts

a) $-2x + 3y = 18$

$$\frac{-2x}{-2} = \frac{18}{-2}$$

$$x = 9$$
 where it crosses x-axis $(-9, 0)$

$$\frac{3y}{3} = \frac{18}{3}$$

$$y = 6$$
 where it crosses y-axis $(0, 6)$

b) $12x - 4y = 12$

$$\frac{-4y}{-4} = \frac{12}{-4}$$

$$y = -3$$

$$(0, -3)$$

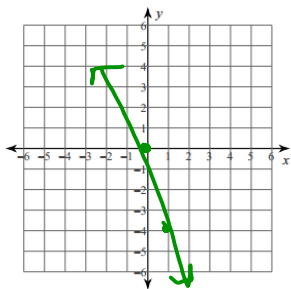
$$\frac{12x}{12} = \frac{12}{12}$$

$$x = 1$$

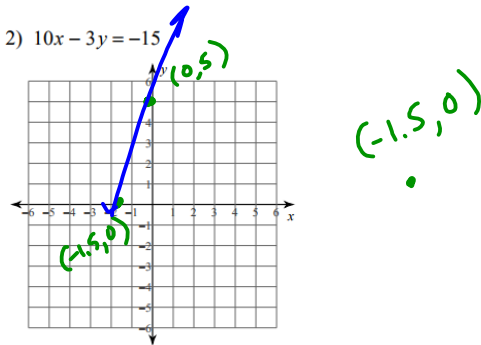
$$(1, 0)$$

Ex 1 Graph from Standard Form

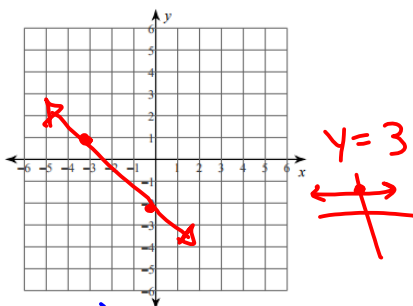
1) $4x + y = 0$



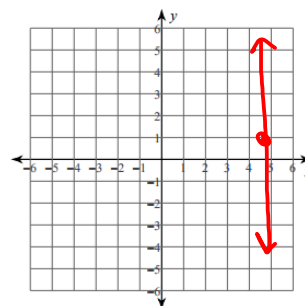
2) $10x - 3y = -15$



3) $x + y = -3$



4) $x = 5$



6) $x - 2y = -6$

$$x = -6$$

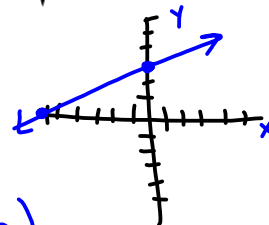
$$x = -6$$

$$(-6, 0)$$

$$-\frac{2y}{-2} = \frac{-6}{-2}$$

$$y = 3$$

$$(0, 3)$$



15, 16, 17, 18, 23, 25, 26