

A line has an equation $y = 4x - 2$. A different line is parallel to that but goes through the point $(-4, 2)$. What is the equation in slope intercept form of that new line?

$$m = 4$$

$$y - y_1 = m(x - x_1)$$

$$y - 2 = 4(x + 4)$$

$$y - 2 = 4x + 16$$

$$y = 4x + 18$$

Graphing Linear Inequalities

Is the ordered pair a solution of the linear inequality?

$$y > 3x + 2 ; (1, 9)$$

$$9 > 3(1) + 2$$

$$9 > 5$$

yes

$$3x < 2y + 9 ; (4, 0)$$

$$3(4) < 2(0) + 9$$

$$12 < 9$$

false

$<$, $>$



\leq , \geq



$$y \geq -3x + 4$$

$$6 \quad -6 + 4$$

$$6 \geq -2$$

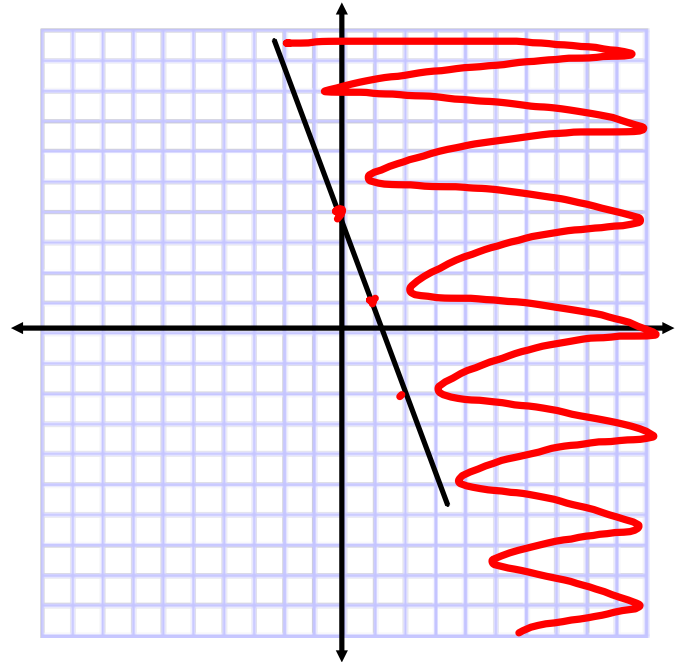
$$0 \geq 4$$

Possible Solutions:

$(2, 4)$

$(0, 0)$

$(0, 4)$



$$y > -x - 5$$

$$0 > -5$$

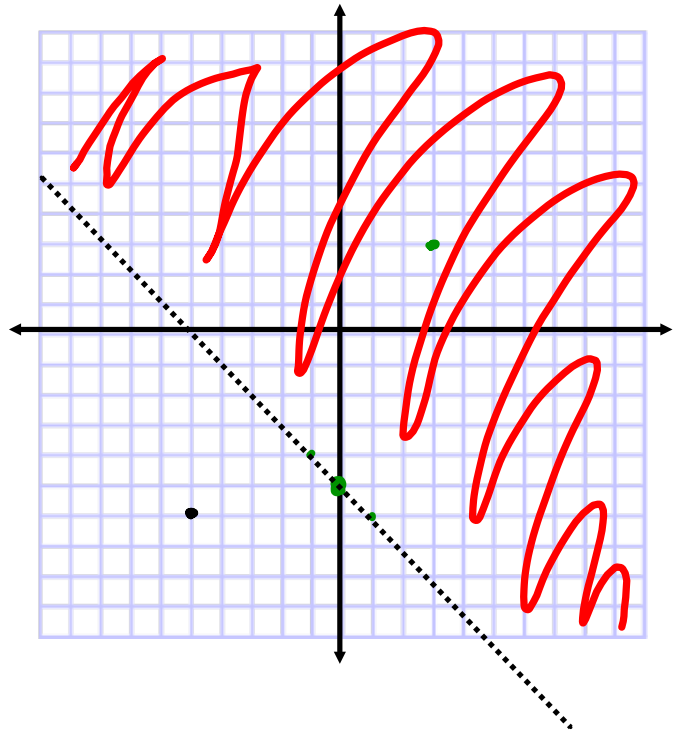
$$\begin{aligned} -6 &> 5 - 5 \\ -6 &> 0 \end{aligned}$$

Possible Solutions:

$$(0, 0) \quad (-5, -6)$$

$$(3, 3)$$

$$\begin{aligned} 3 &> -3 - 5 \\ 3 &> -8 \end{aligned}$$

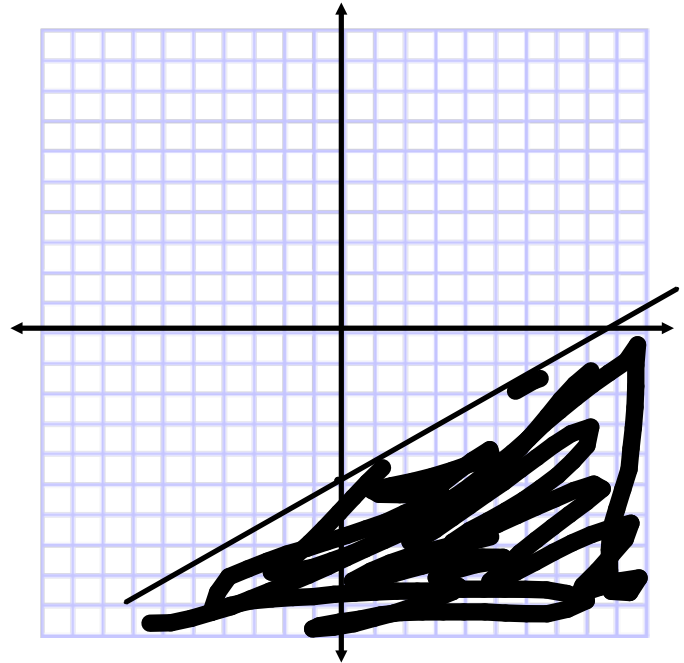


$$y \leq \frac{3}{5}x - 5$$

Possible Solutions:

(0, 0)

(10, 2)

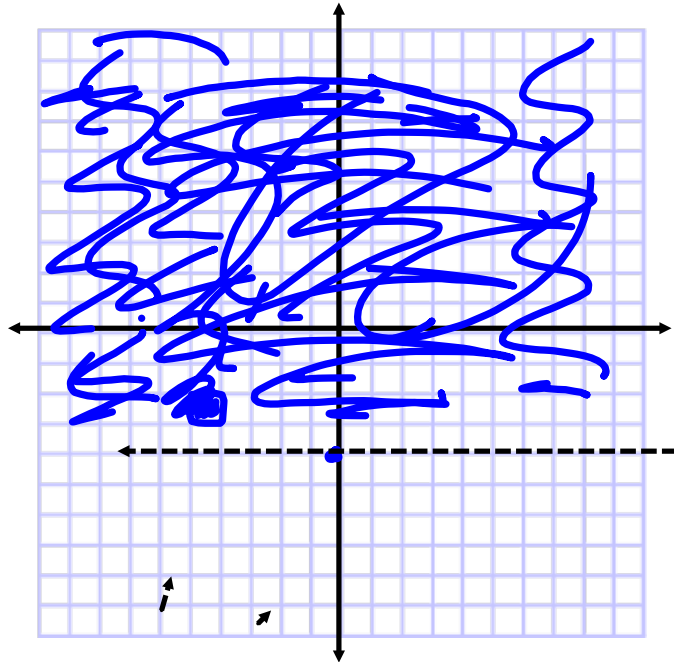


$$y > -4$$
$$0 > -4$$

true

Possible Solutions:

$$(0,0)$$



$$-4x - 2y > 10$$

$$\begin{aligned} -2y &> 4x + 10 \\ y &< -2x + 5 \end{aligned}$$

Possible Solutions:

$$(0, 0)$$

$$0 \leq 5$$

