

## **5-3: Graphing Linear Inequalities**

**Objectives: I can graph a linear inequality**

## Vocab:

Inequality *not* equal

Solution set answer

$x < y$  Less than



$x \leq y$  Less or equal



$x > y$  Greater



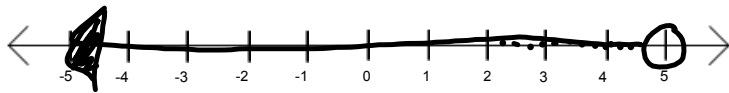
$x \geq y$  Greater or =



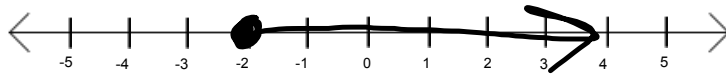
## REVIEW:

Graph the inequalities on a number line

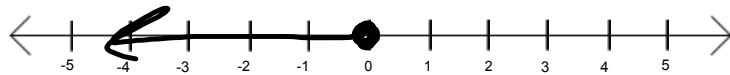
$x < 5$



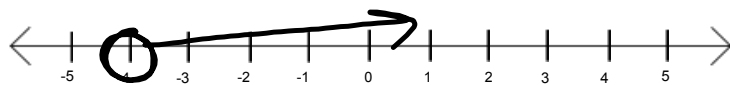
$x \geq -2$



$x \leq 0$

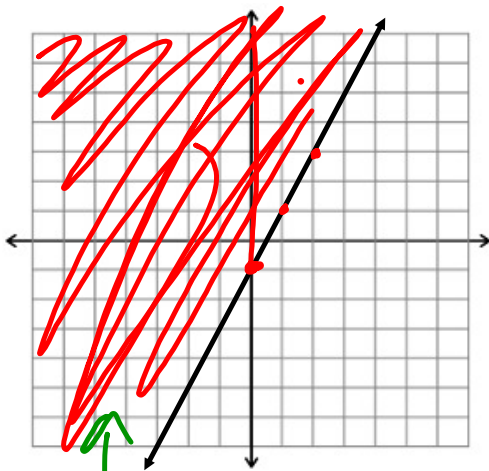


$x > -4$



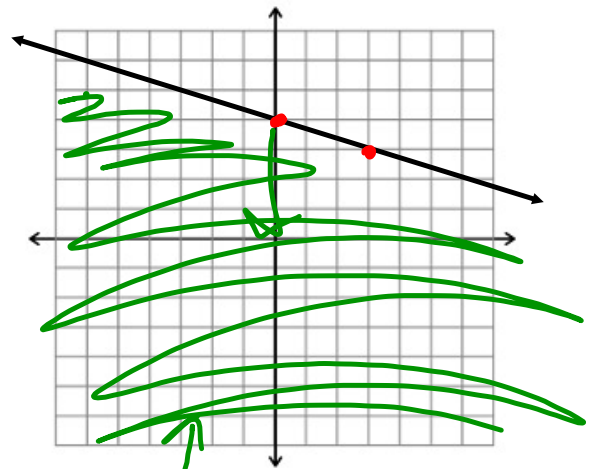
Shade the linear inequality:

$$y \geq 2x - 1$$



SOLUTION  
SET

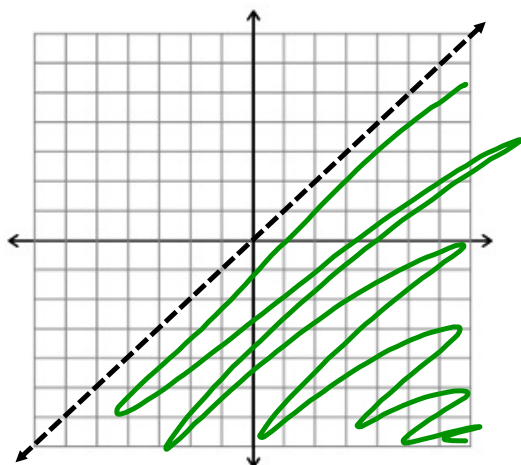
$$y \leq -\frac{1}{3}x + 4$$



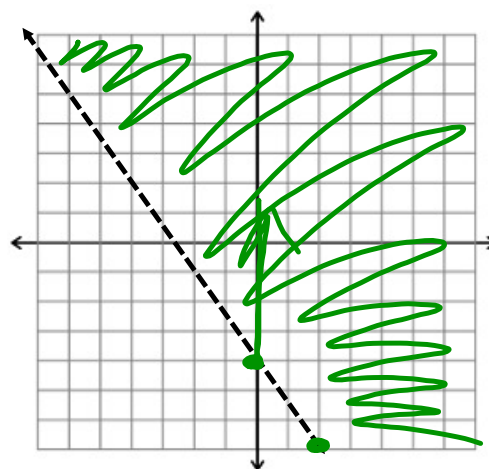
SOLUTION  
SET

Shade the linear inequality:

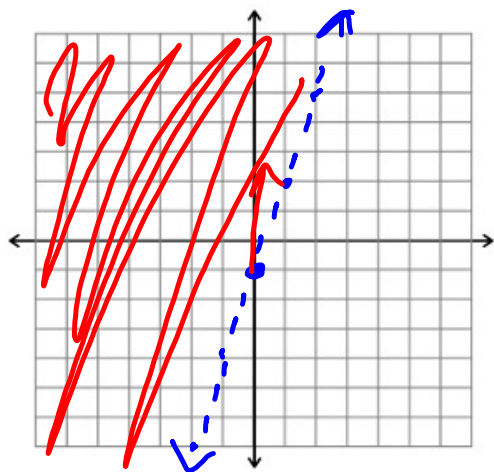
$$y < x + 0$$



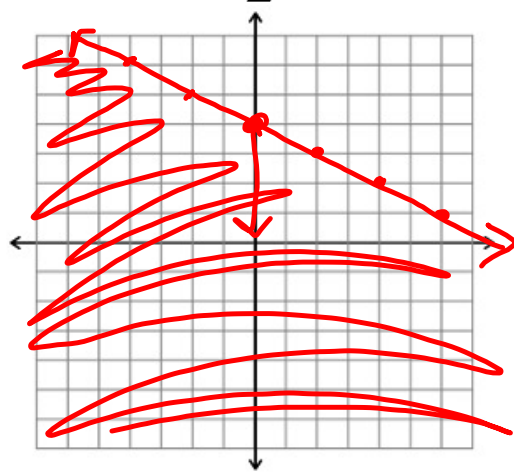
$$y > -\frac{3}{2}x - 4$$



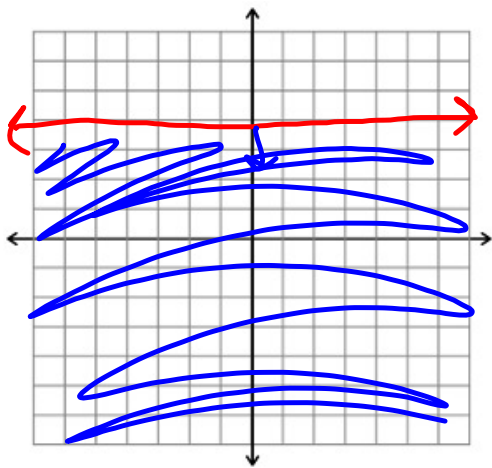
$$y > 3x - 1$$



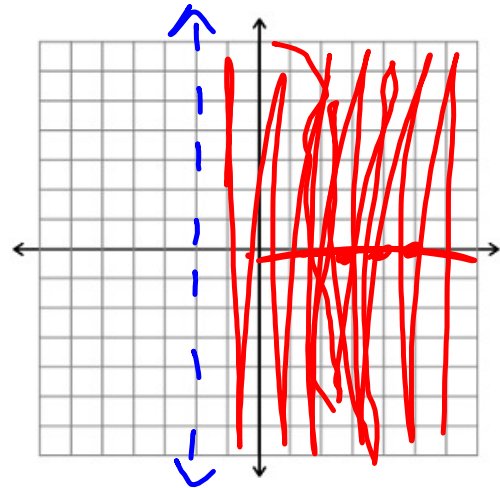
$$y \leq -\frac{1}{2}x + 4$$



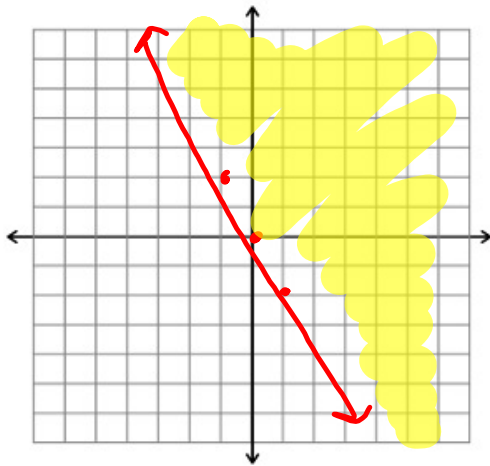
$$y \leq 4$$



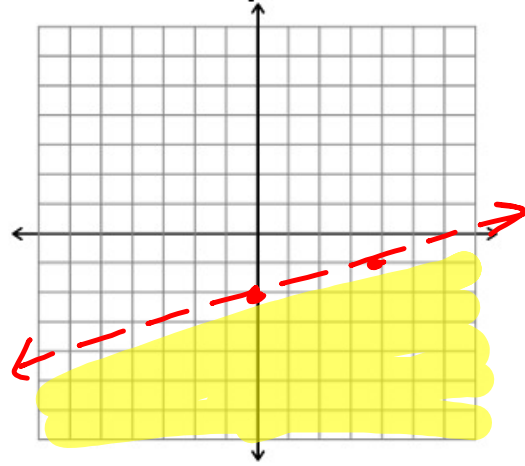
$$x > -2$$



$$y \geq -2x$$



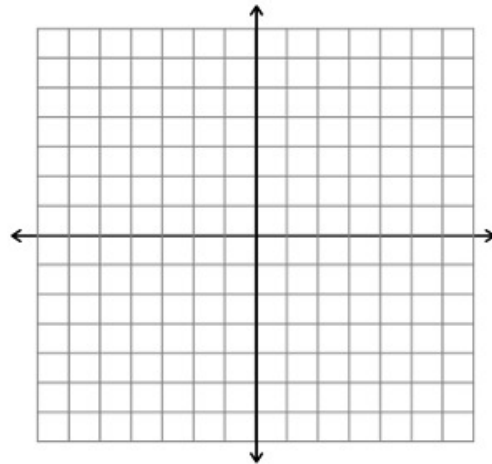
$$y < \frac{1}{4}x - 2$$





Graph the linear inequality:

$$y < x + 3$$



Is  $(-2, 4)$  in the solution set?

Is  $(3, 1)$  in the solution set?