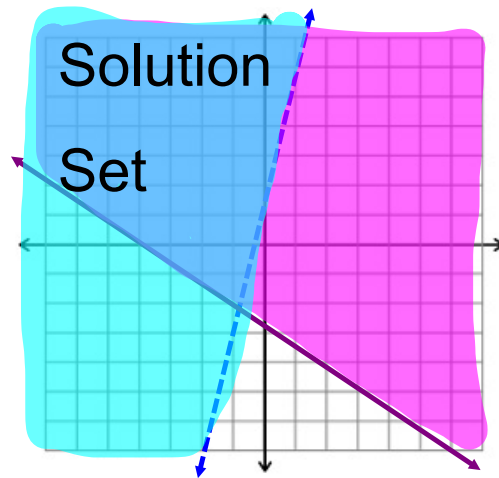


## 5-4 Systems of Linear Inequalities

Objectives: I can graph a system of linear inequalities

Vocab: Solution set

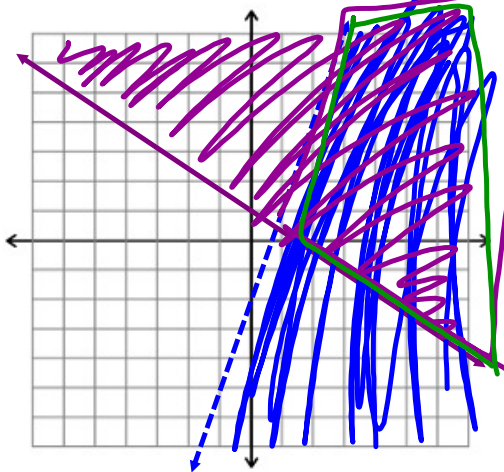
## Solution to a system of Inequalities



### Practice finding the solution set

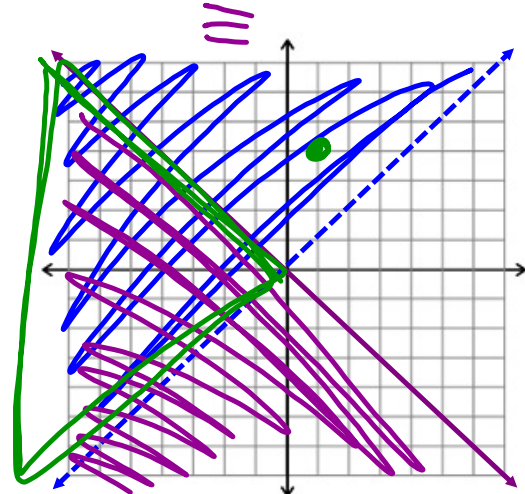
●  $y < 3x - 2$

●  $y \geq -\frac{2}{3}x + 1$



●  $y > x$

●  $y \leq -x$

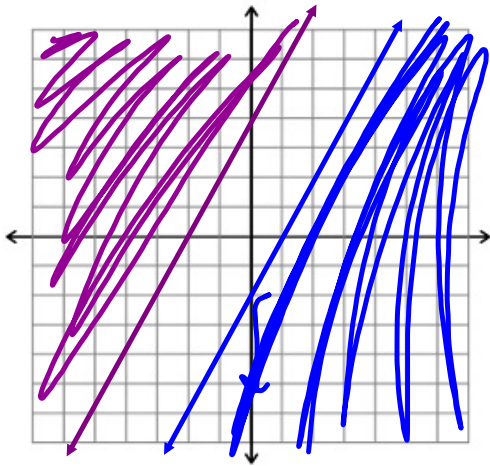


$(1, 4)$

Practice finding the solution set

•  $y < 2x - 2$

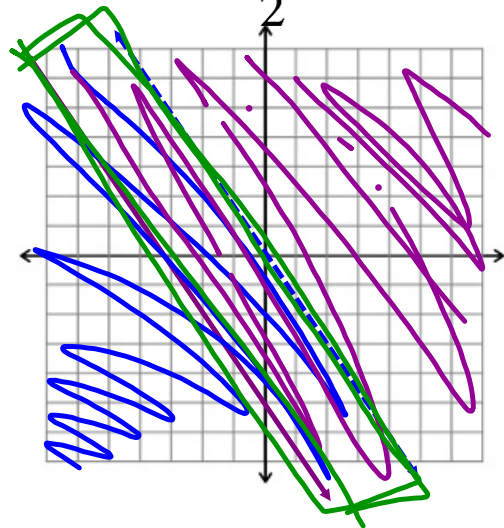
•  $y > 2x + 4$



No solution

•  $y < -\frac{3}{2}x$

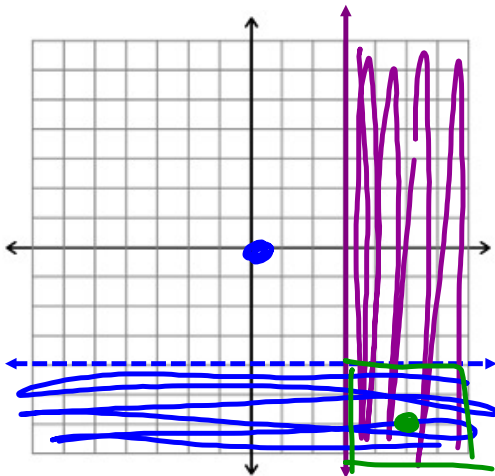
•  $y \geq -\frac{3}{2}x - 5$



Find the solution set

●  $x \geq 3$

●  $y < -4$



Is  $(0,0)$  a solution?

No

Is  $(5,-6)$  a solution?

Yes

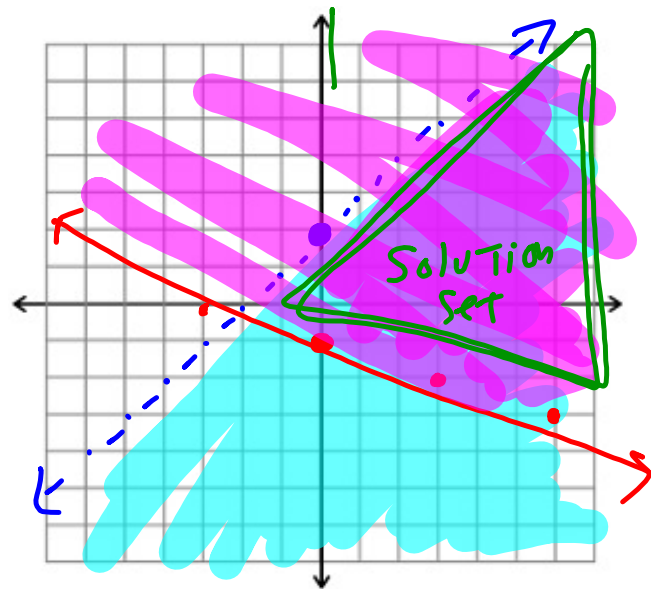
List one ordered pair that IS  
a solution: (IN BOX)

List one ordered pair that is  
NOT a solution: (OUT OF BOX)

Solve the system of inequalities by graphing

$$y < x + 2$$

$$y \geq -\frac{1}{3}x - 1$$

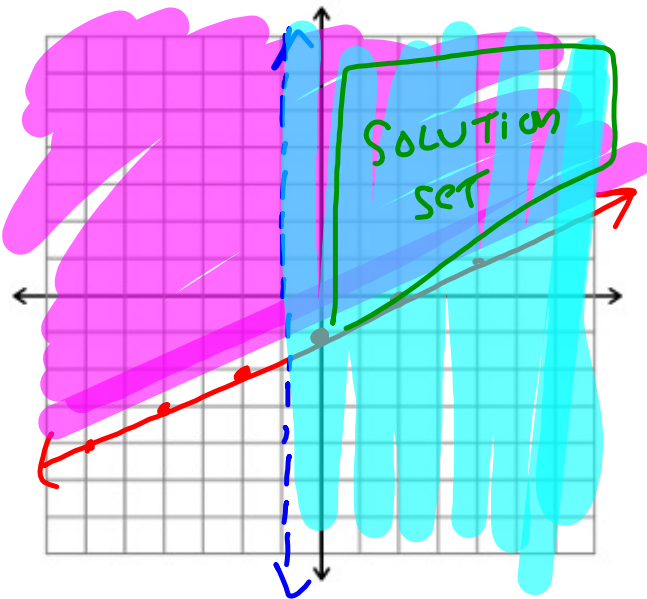


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Solve the system of inequalities by graphing:

$$y \geq \frac{1}{2}x - 1$$

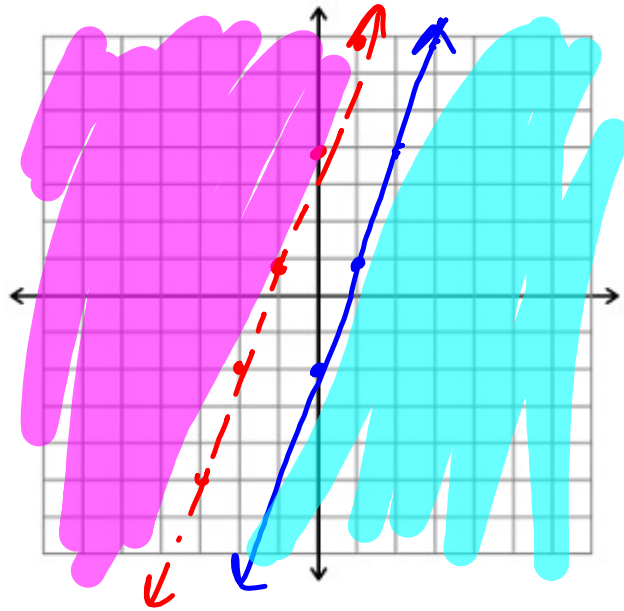
$$x > -1$$



Solve the system of inequalities by graphing:

$$y \leq 3x - 2$$

$$y > 3x + 4$$



No Solution



Solve the system of inequalities by graphing:

$$y \geq -4$$

$$y \leq -3x + 2$$

