Graph

$2x - 3y \leq 6$

$y > \frac{-1}{4}x + 8$

} same axes

$2x - 3y = 6$

$-3y = 6$

$y = -2$

$(0, -2)$

$2x = 6$

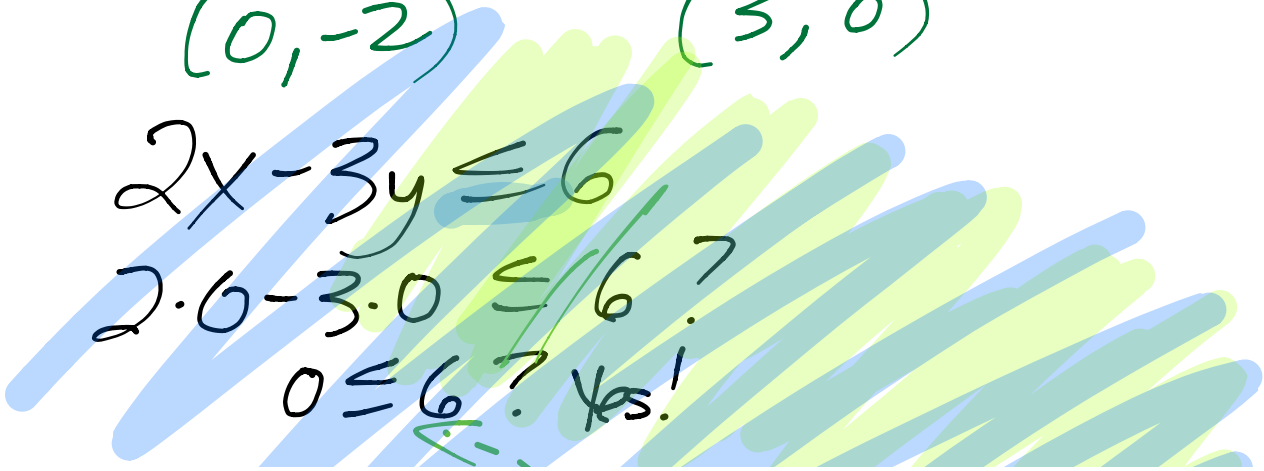
$x = 3$

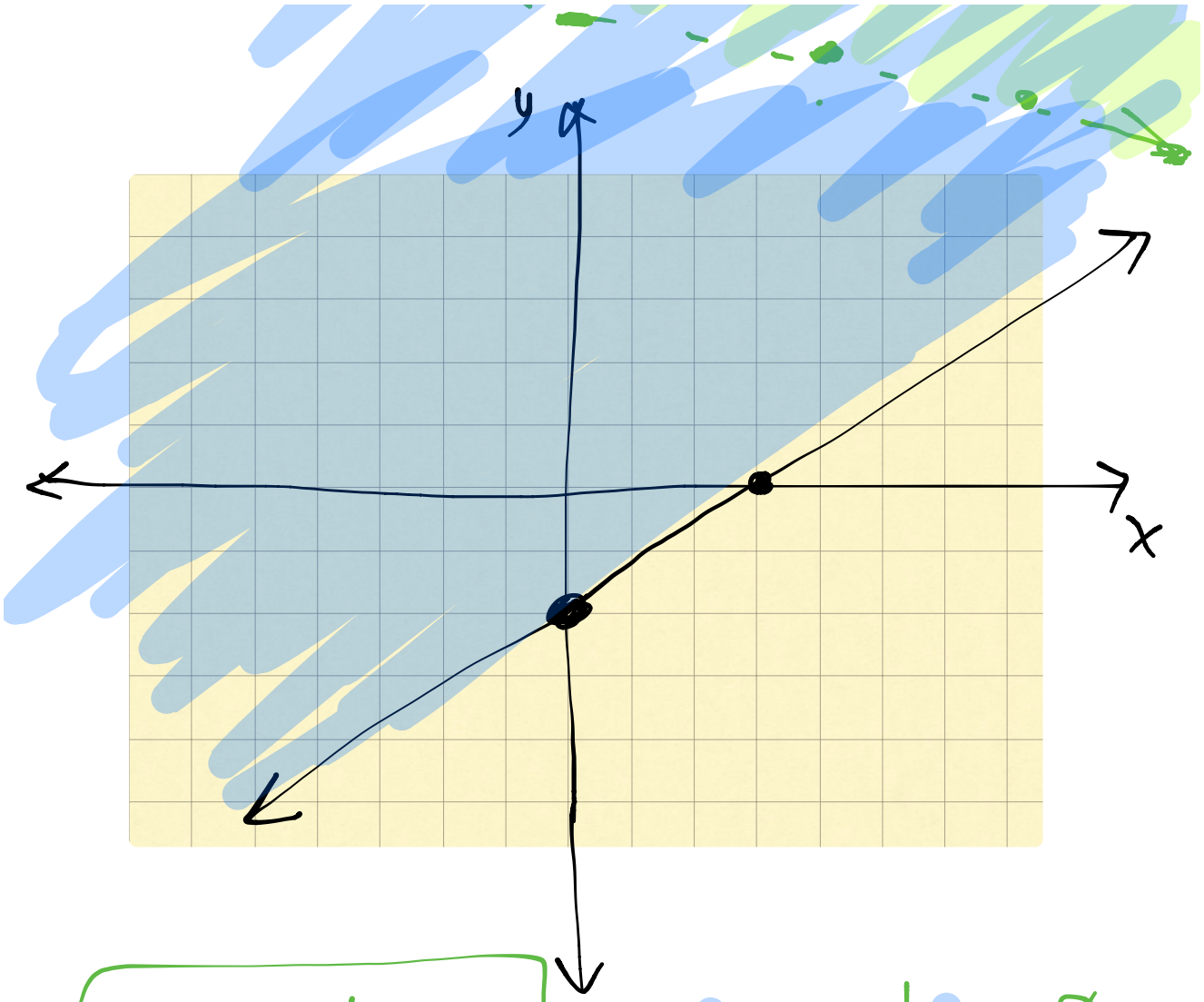
$(3, 0)$

$2x - 3y \leq 6$

$2 \cdot 0 - 3 \cdot 0 \leq 6$?

$0 \leq 6$? Yes!



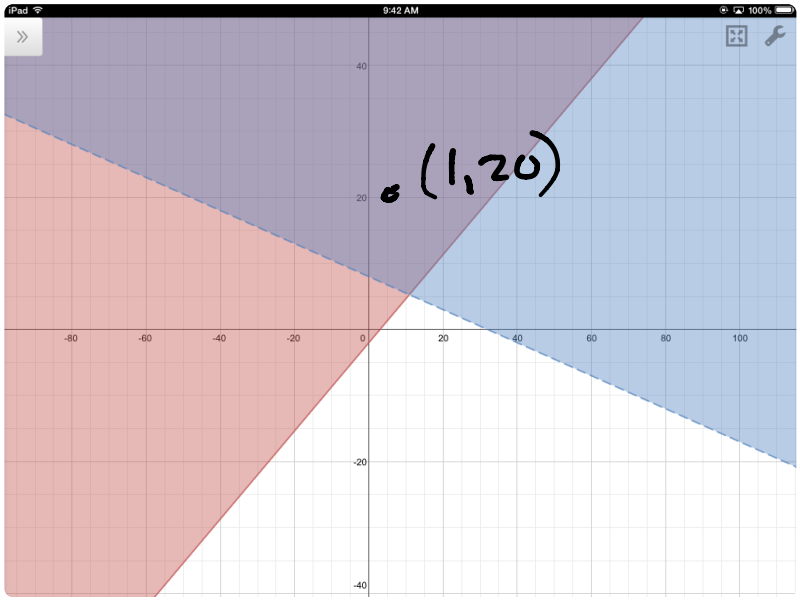


$y = -\frac{1}{4}x + 8$

$y > -\frac{1}{4}x + 8$

$0 > -\frac{1}{4} \cdot 0 + 8$

Is $0 > 8$? No.



$2x-3y \leq 6$

$2 \cdot 1 - 3 \cdot 20$

$2 - 60$

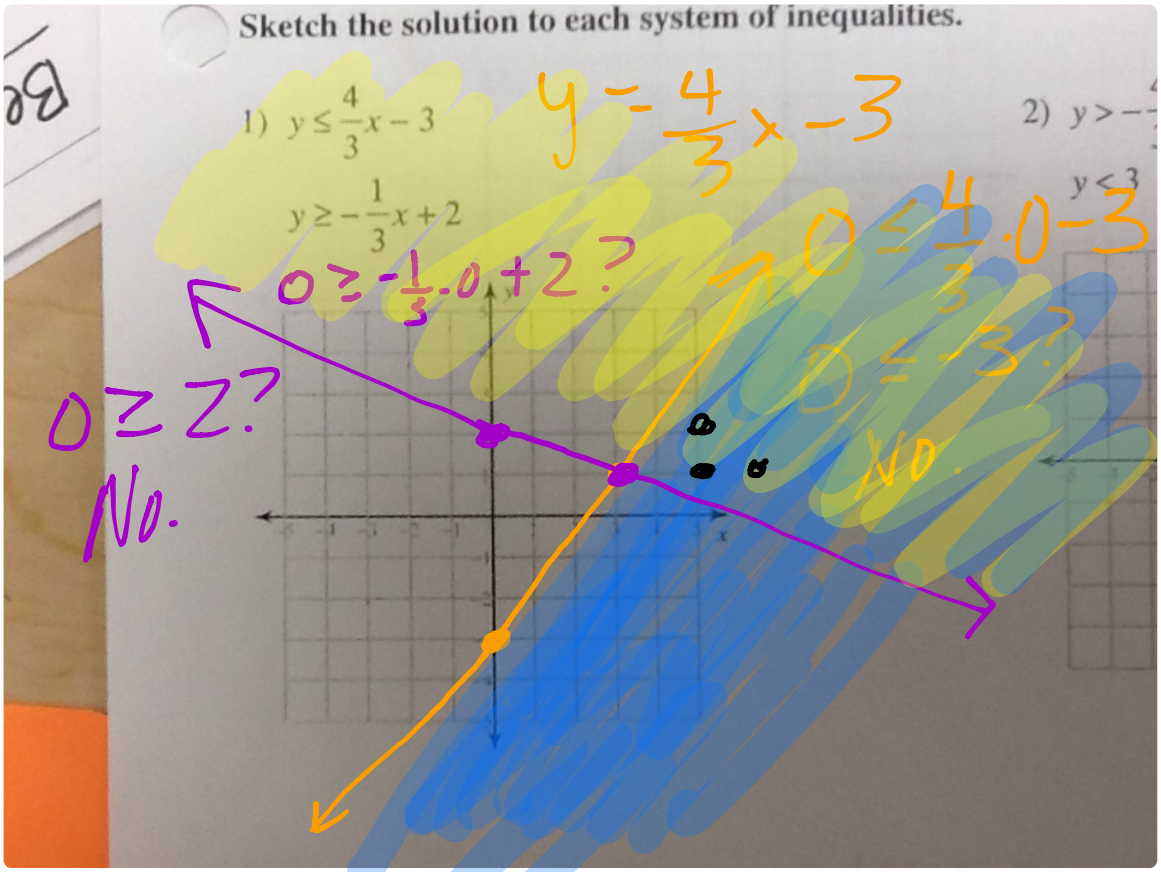
$-58 < 6$ ✓

$y > -\frac{1}{4}x + 8$

$20 > -\frac{1}{4} \cdot 1 + 8$

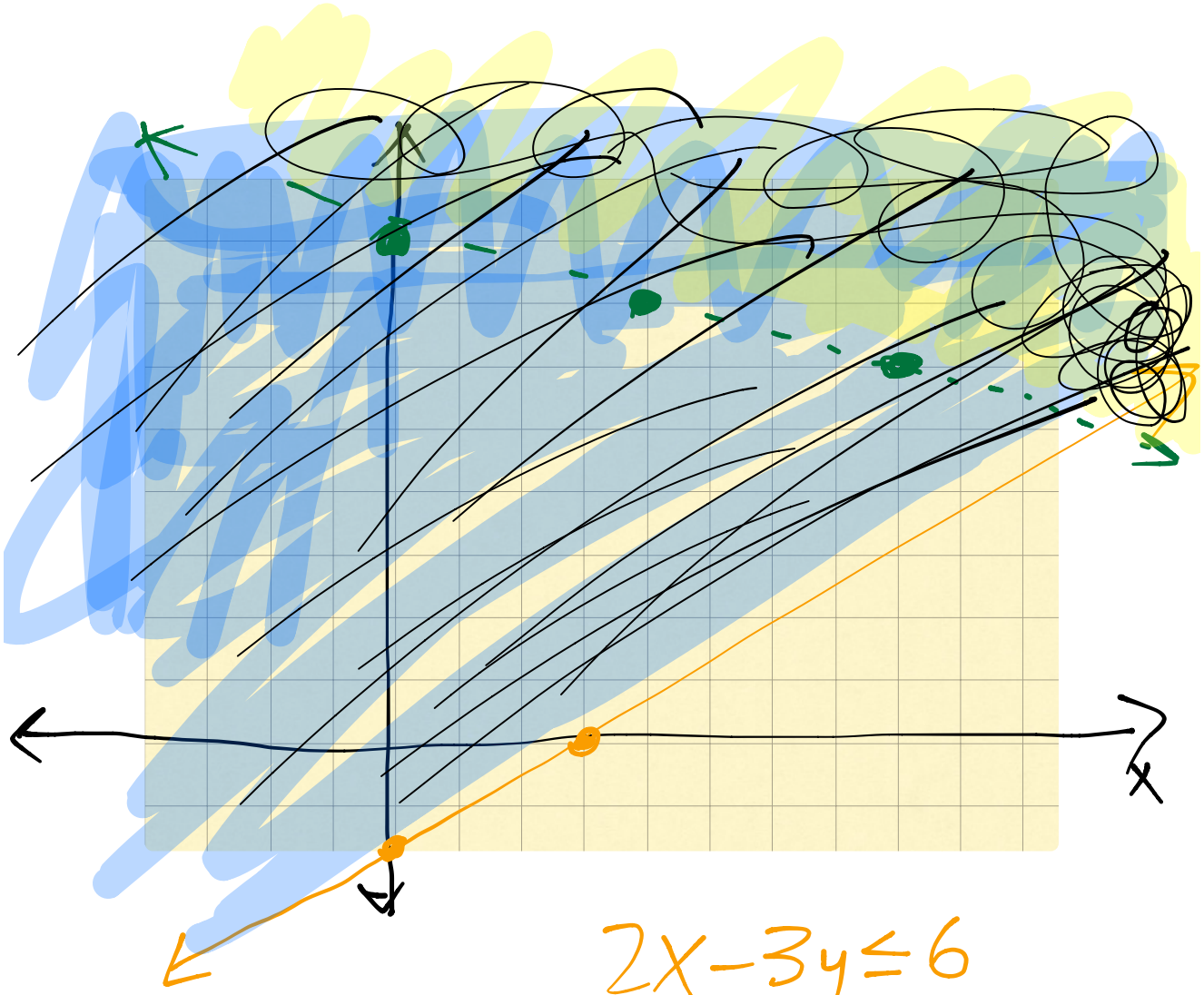
$20 > 7\frac{3}{4}$ ✓

Solution to a system of inequalities is the region of overlap.



List 3 ordered pairs that are in the solution region.

(5,1) (5,2) (6,1)



$2x - 3y \leq 6$

$2 \cdot 0 - 3 \cdot 0 \leq 6$

$0 \leq 6$?

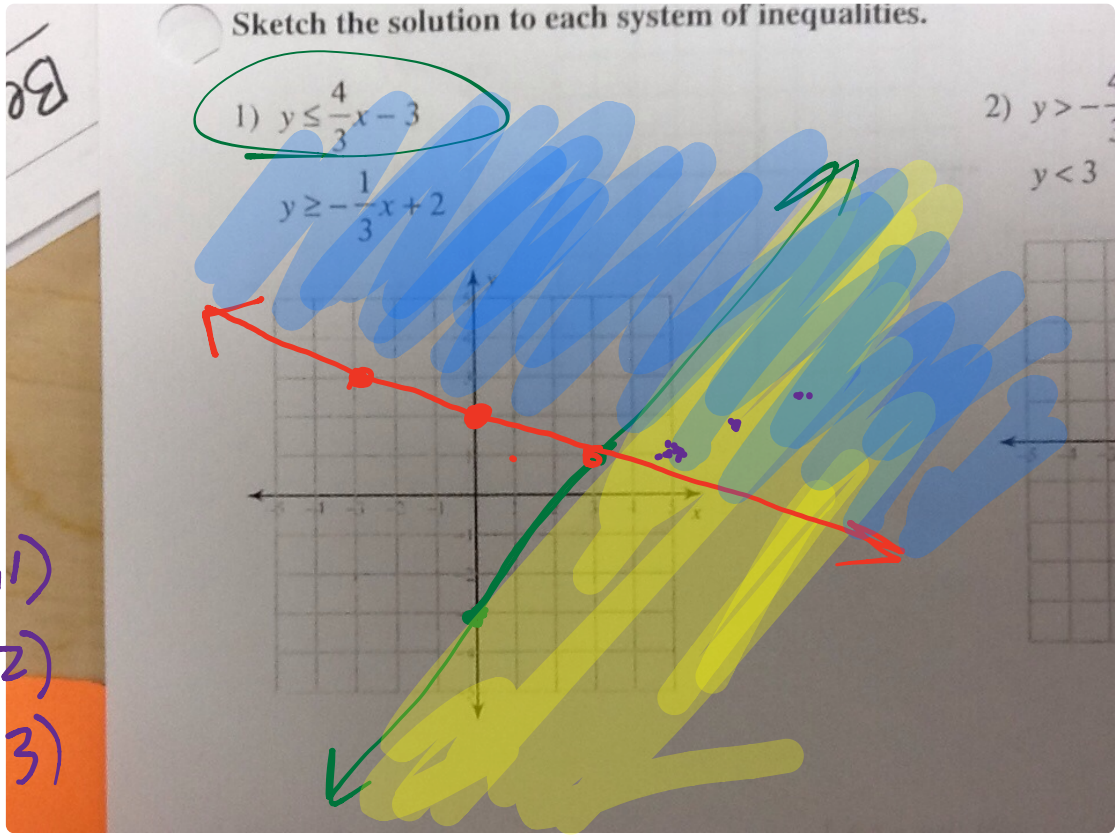
Yes

$y > -\frac{1}{4}x + 8$

Is $0 > -\frac{1}{4} \cdot 0 + 8$?

$0 > 8$? No.

Plot & label 3 pts. 3 ordered pairs that are in solution region.



(5,1)
(6,2)
(7,3)

Is $0 \leq \frac{4}{3} \cdot 0 - 3$?
$0 \leq -3$? No. Shade the

side that does not have $(0,0)$.

Is $0 \geq -\frac{1}{3} \cdot 0 + 2$?

$0 \geq 2$? No.