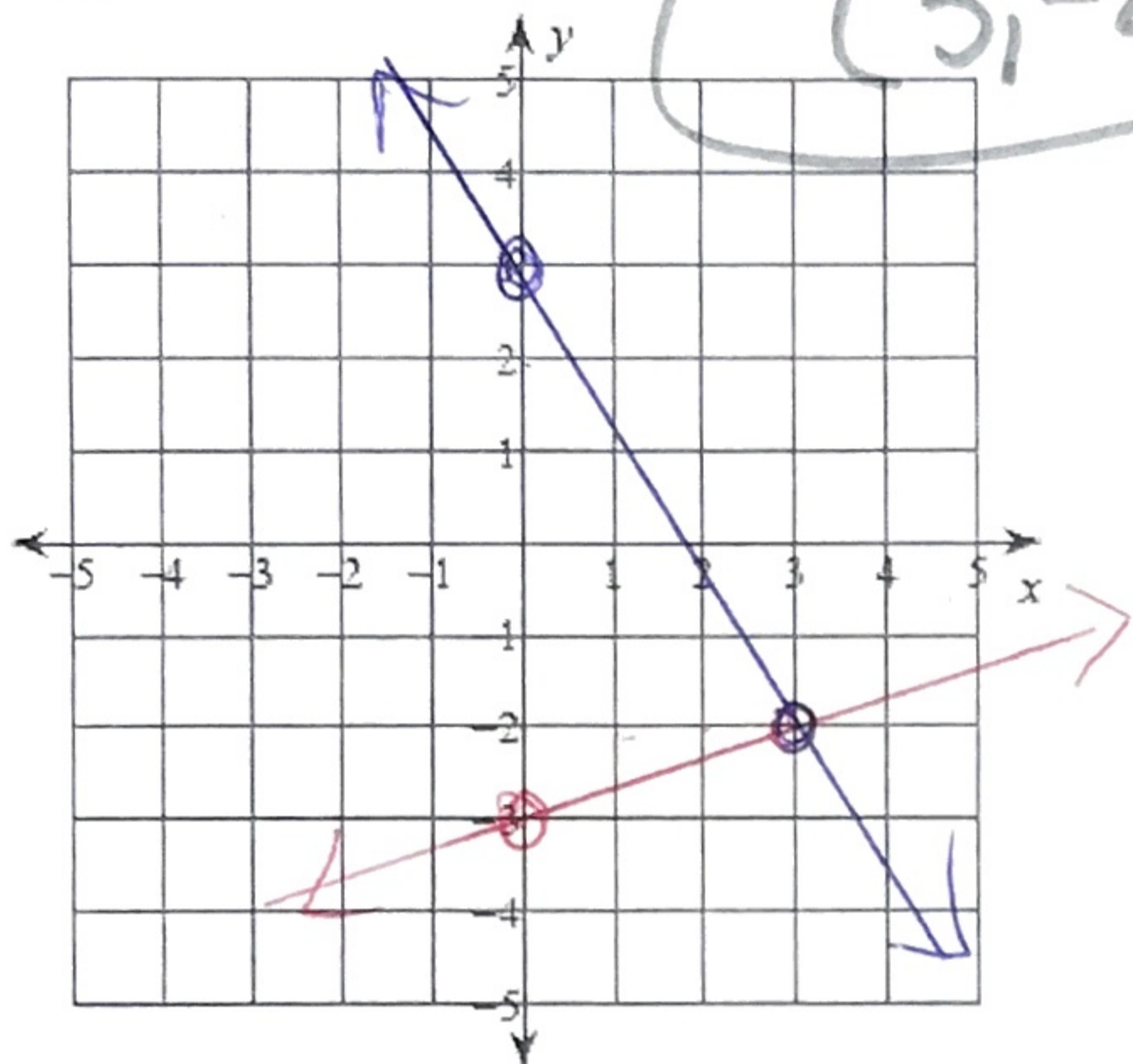


Solve each system by graphing.

1) $y = -\frac{5}{3}x + 3$

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

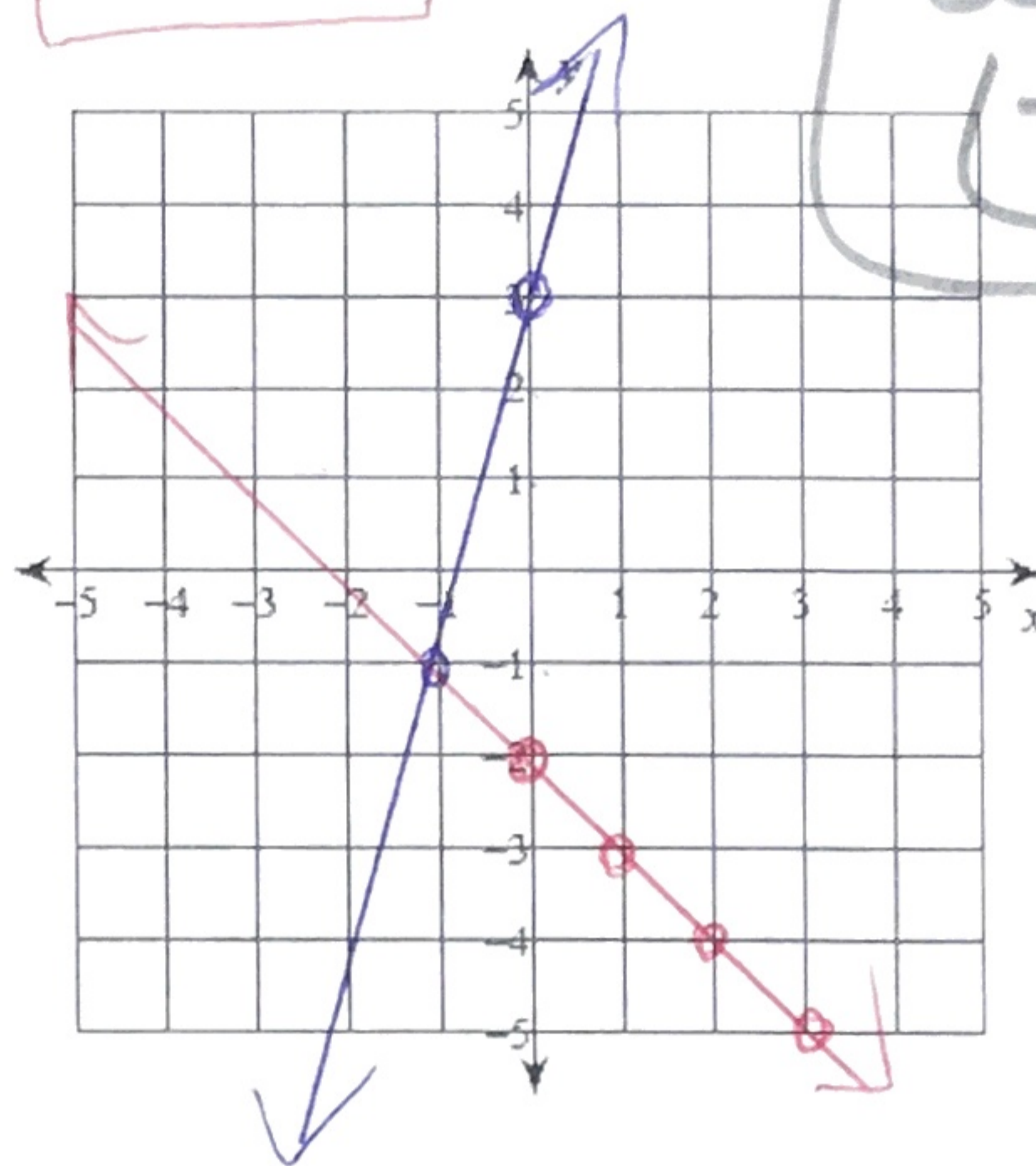
Sol'n
(3, -2)



2) $y = 4x + 3$

$y = -x - 2$

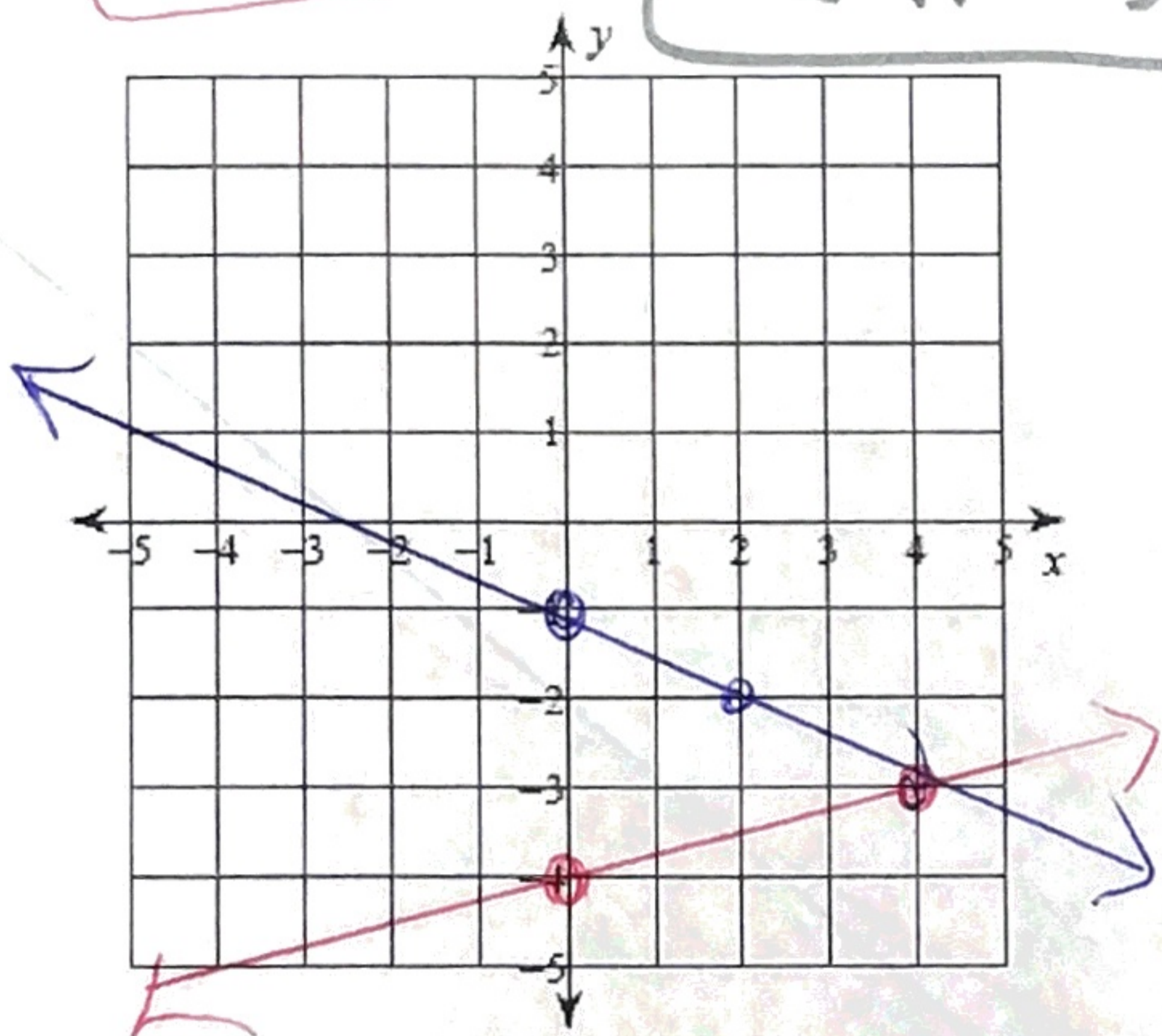
Sol'n
(-1, -1)



3) $y = -\frac{1}{2}x - 1$

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

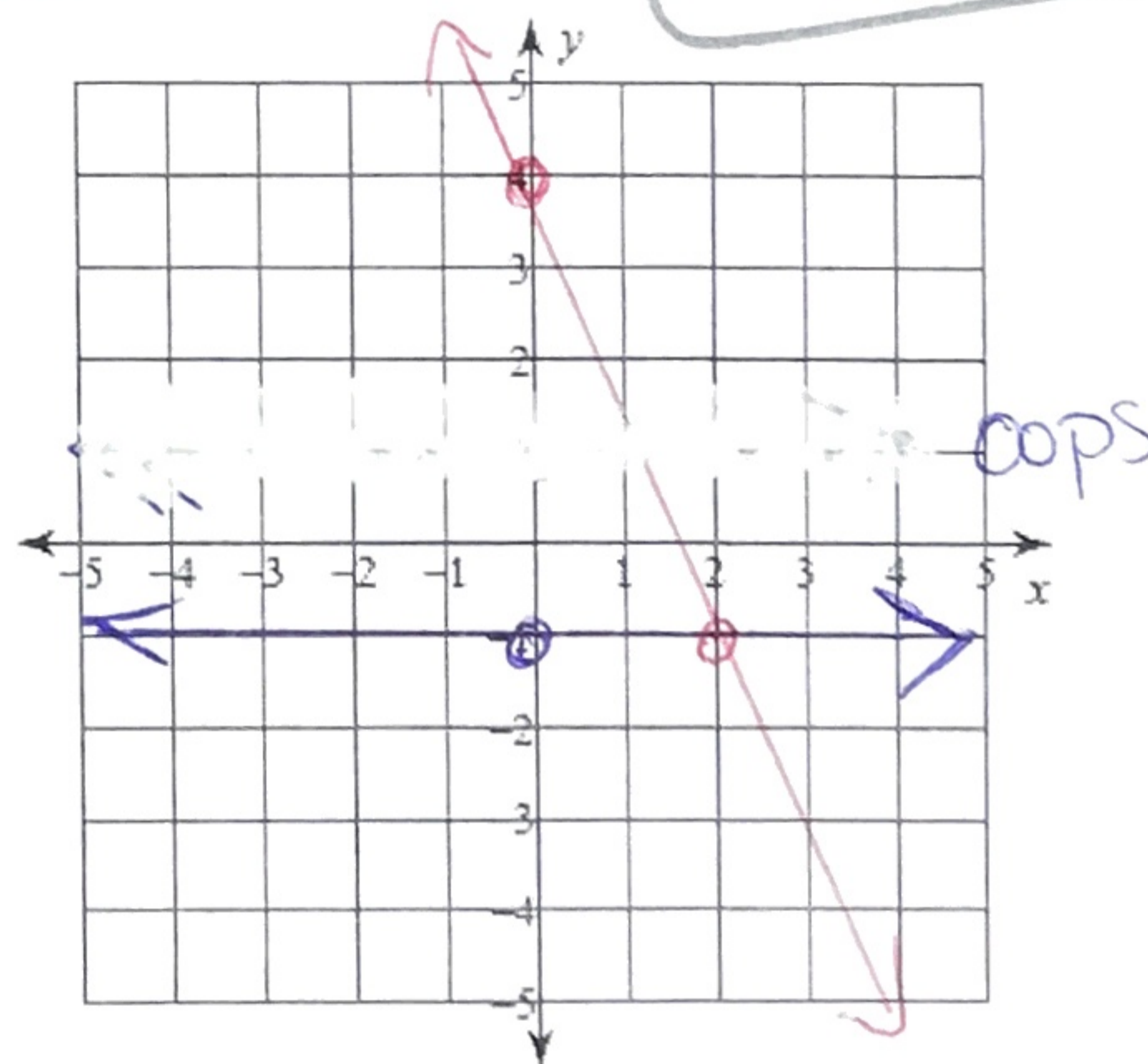
Sol'n
(4, -3)



4) $y = -1$

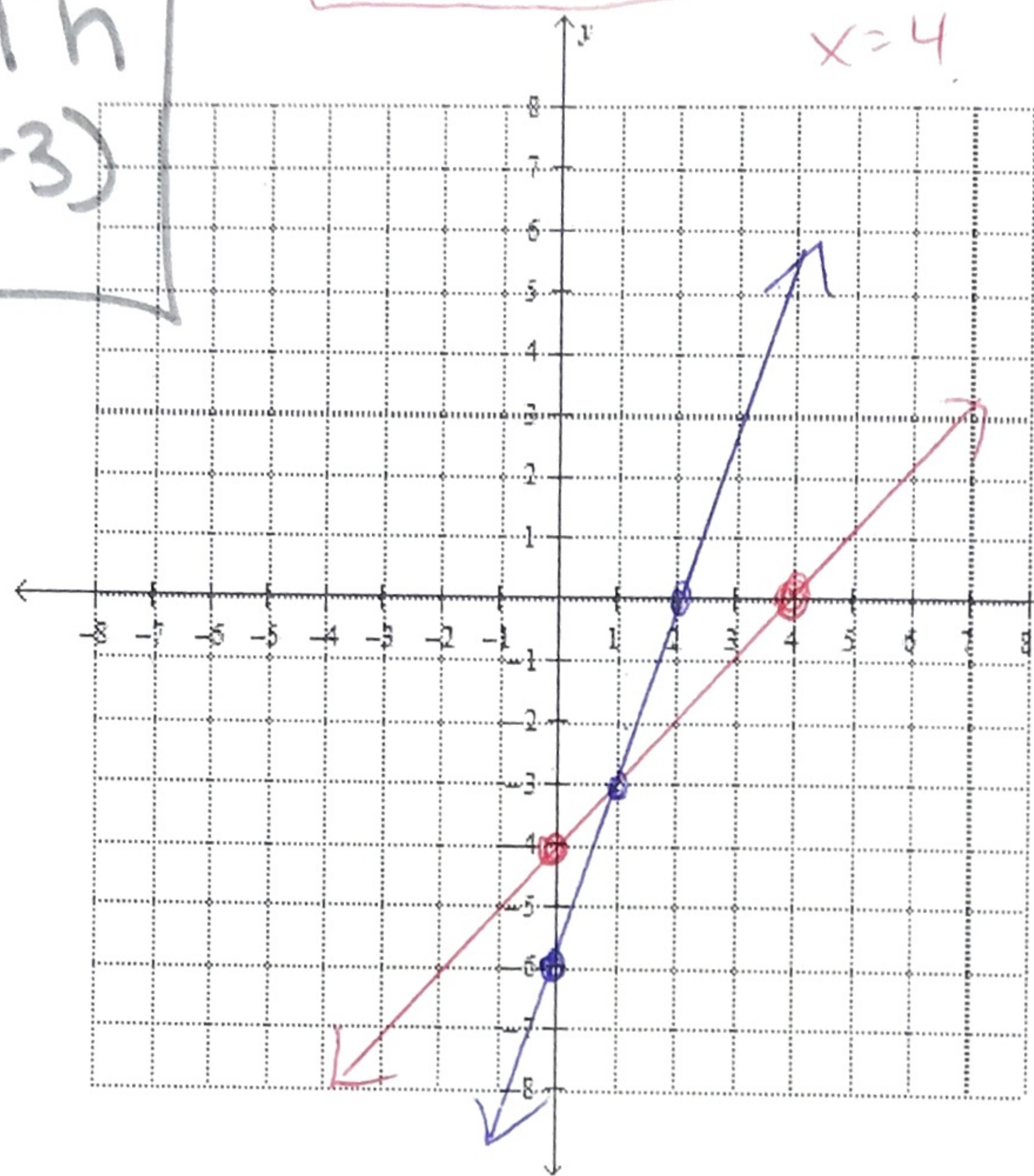
$y = -\frac{5}{2}x + 4$

Sol'n
(2, -1)



$$\begin{cases} y = 3x - 6 \\ 3x - 3y = 12 \end{cases}$$

Sol'n
(1, -3)



$$3x + 3(0) = 12 \quad 3(0) + 3y = 6$$

$$x = 4 \quad y = -4$$

$$\begin{cases} 2x - 8y = 6 \\ y + 5 = -(x + 2) \end{cases}$$

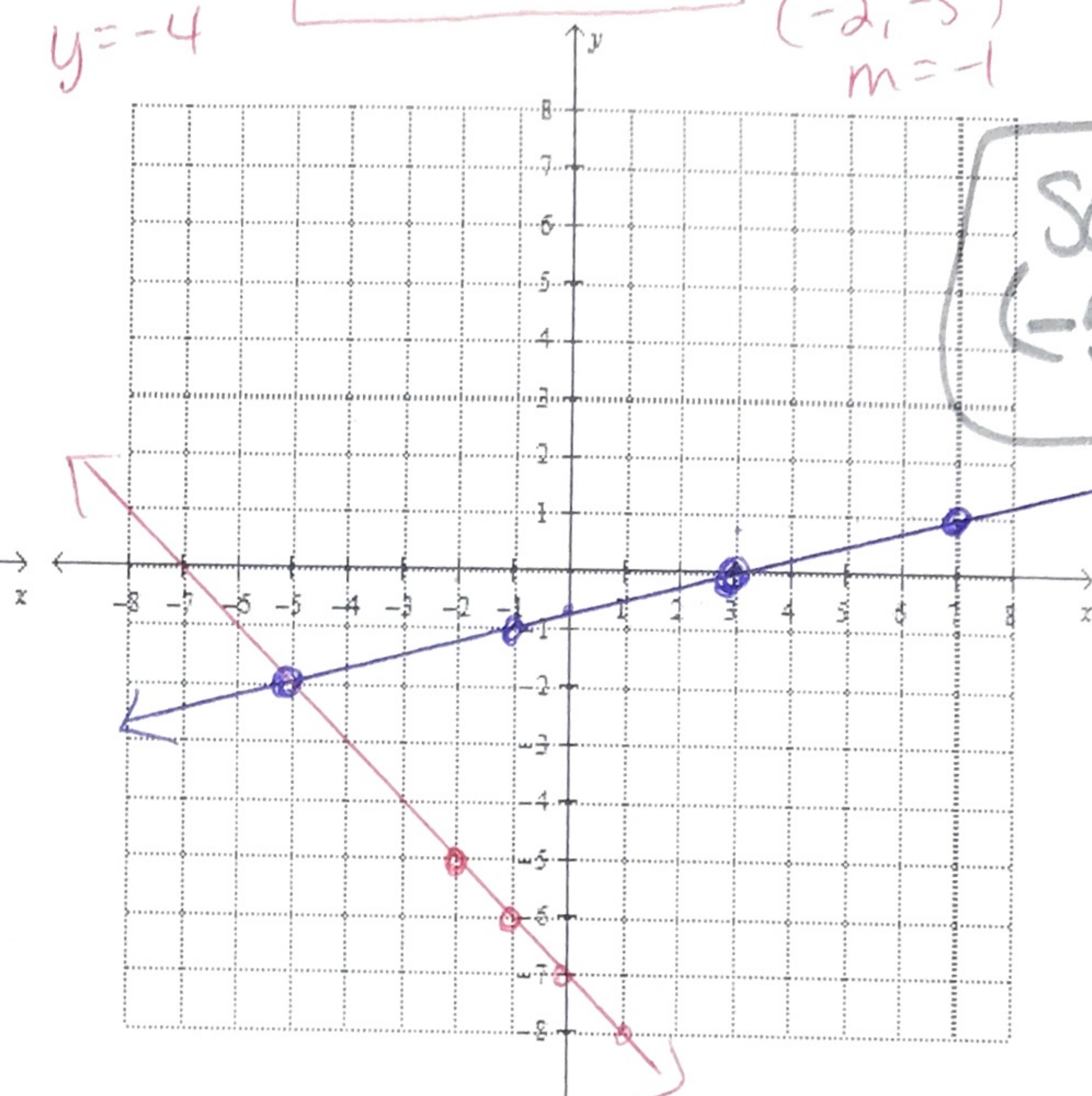
$$-\frac{8y}{-8} = \frac{-2x + 6}{-8} \quad y = \frac{1}{4}x - \frac{3}{4}$$

Slope from (3, 0)

$$2x - 8(0) = 6 \quad x = 3$$

$$(-2, -5) \quad m = -1$$

Sol'n
(-5, -2)



Jason and Felix are racing to see who can get his community service hours for scouting completed first. Jason, who has already completed 100 hours, plans to volunteer for 12 hours per week going forward. Felix hasn't started yet, but plans to dedicate 16 hours per week to his volunteer project from now on. Before too long, the boys will be tied, with the same number of volunteer hours. How long will that take?

7. Write a system of equations.

$$y_F = 16x + 0$$

$$y_J = 12x + 100$$

8. Graph to find your answer.

About 25 weeks

