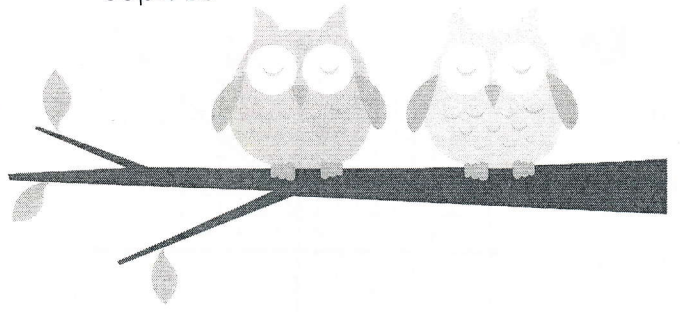


Name: Key

Sept. 18
Sept. 20



Activity: All Tangled Up!

Objective: Students will be able to:

- ✓ Write an equation of a line given a graph
- ✓ Graph an equation of a line
- ✓ Find a solution to a system of equations

Directions:

1. Find the equation of the line in each graph. Give the corresponding equation in the box.
2. Use the given slope and y-intercept to write the equation of the new line then graph it.
3. State the point of intersection of the system of equations.

1

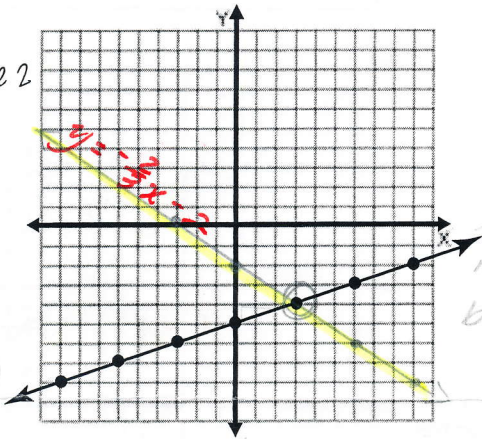
Info for Line 2

$$m = -\frac{2}{3}$$

$$b = -2$$

Point of intersection

$(3, -4)$



$$y = 3x - 5$$

Equation:

$$x - 3y = 15$$

2

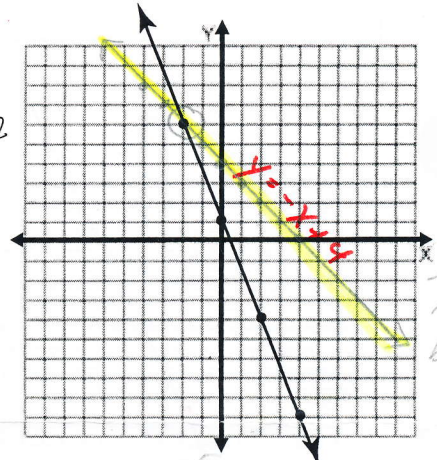
Info for Line 2

$$m = -1$$

$$b = 4$$

Point of intersection

$(-2, 6)$



$$y = -\frac{5}{2}x + 1$$

Equation:

$$5x + 2y = 2$$

3

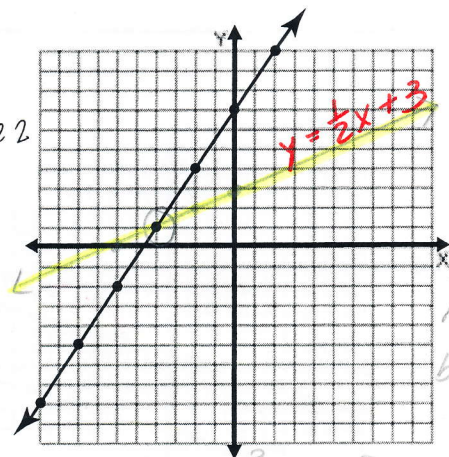
Info for Line 2

$$m = \frac{1}{2}$$

$$b = 3$$

Point of intersection

$(-4, 1)$



$$y = \frac{3}{2}x + 7$$

Equation:

$$3x - 2y = -14$$

4

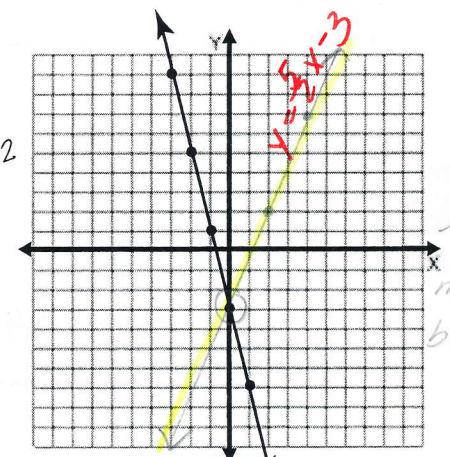
Info for Line 2

$$m = \frac{5}{2}$$

$$b = -3$$

Point of intersection

$(0, -3)$



$$y = -4x - 3$$

Equation:

$$4x + y = -3$$

5

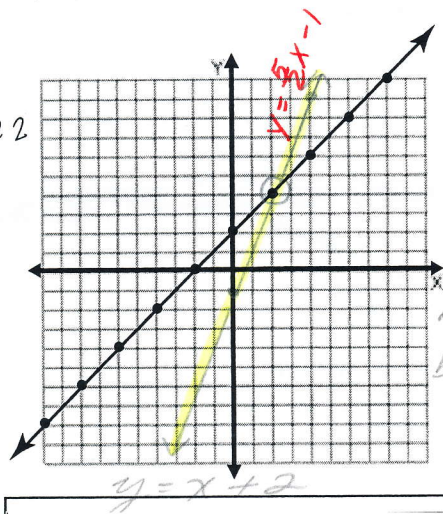
Info for Line 2

$$m = \frac{5}{2}$$

$$b = -1$$

Point of intersection

$$(2, 4)$$



Equation:

$$x - y = -2$$

1

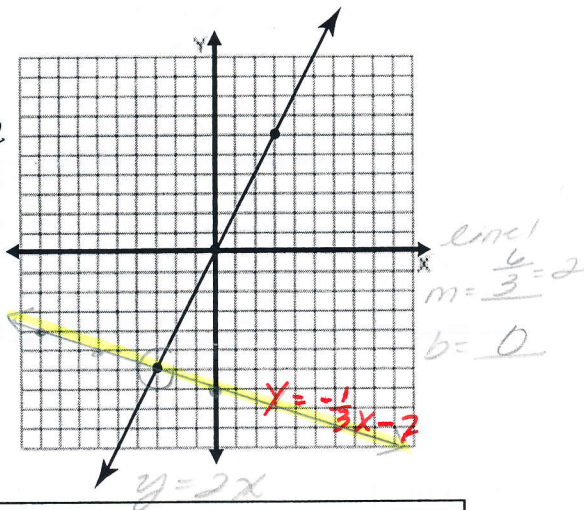
Info for Line 2

$$m = -\frac{1}{3}$$

$$b = -7$$

Point of intersection

$$(-3, -6)$$



Equation

$$2x - y = 0$$

6

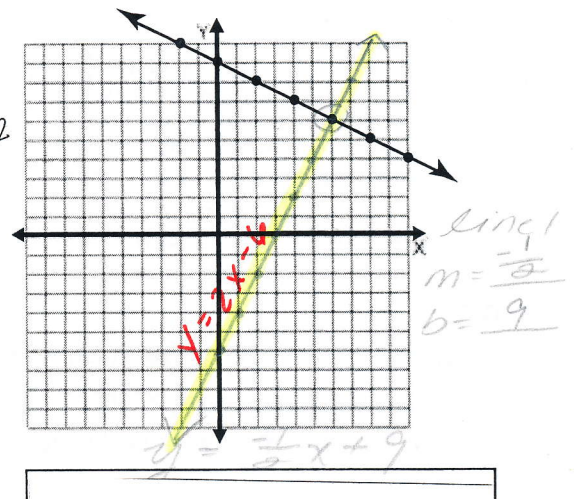
Info for Line 2

$$m = 2$$

$$b = -6$$

Point of intersection

$$(6, 6)$$



Equation:

$$x + 2y = 18$$

8

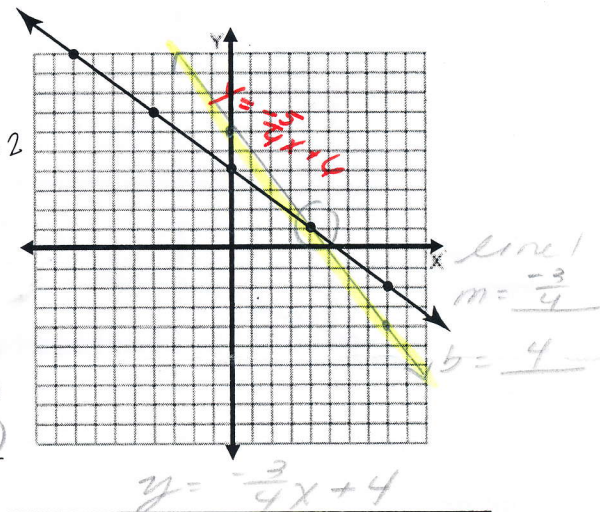
Info for Line 2

$$m = -\frac{5}{4}$$

$$b = 6$$

Point of intersection

$$(4, 1)$$



Equation:

$$3x + 4y = 16$$

9

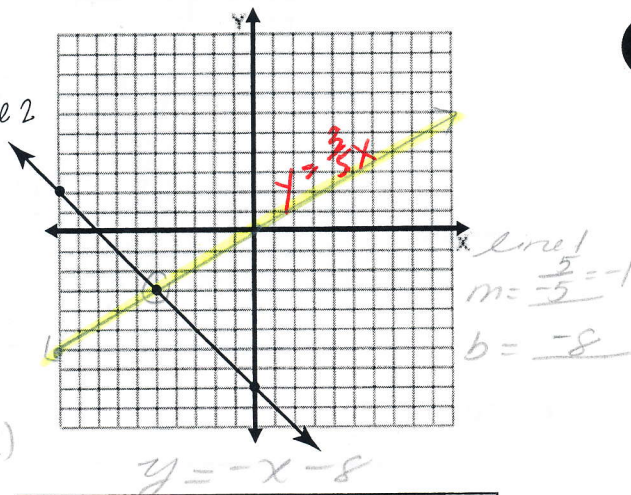
Info for Line 2

$$m = \frac{3}{5}$$

$$b = 0$$

Point of intersection

$$(-5, -3)$$



Equation:

10

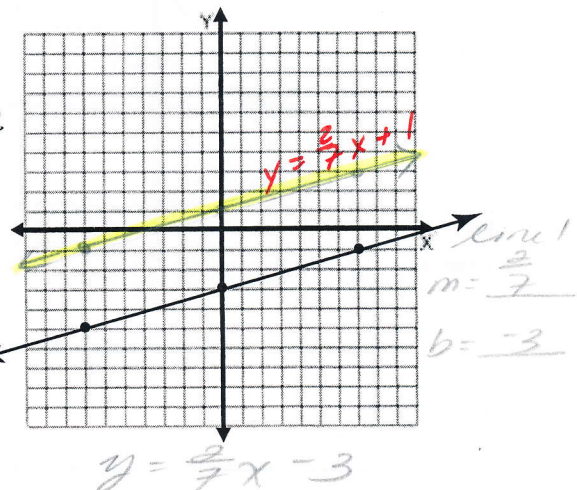
Info for Line 2

$$m = \frac{2}{7}$$

$$b = 1$$

Point of intersection

none



Equation:

$$2x - 7y = 21$$