

**1.4 Do Now: Graphing lines and finding intersections**

1. Graph and label the two equations. Mark their intersection as an ordered pair.

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

$$2x + y = 5$$

Write down the slope and  $y$ -intercept of the first equation.

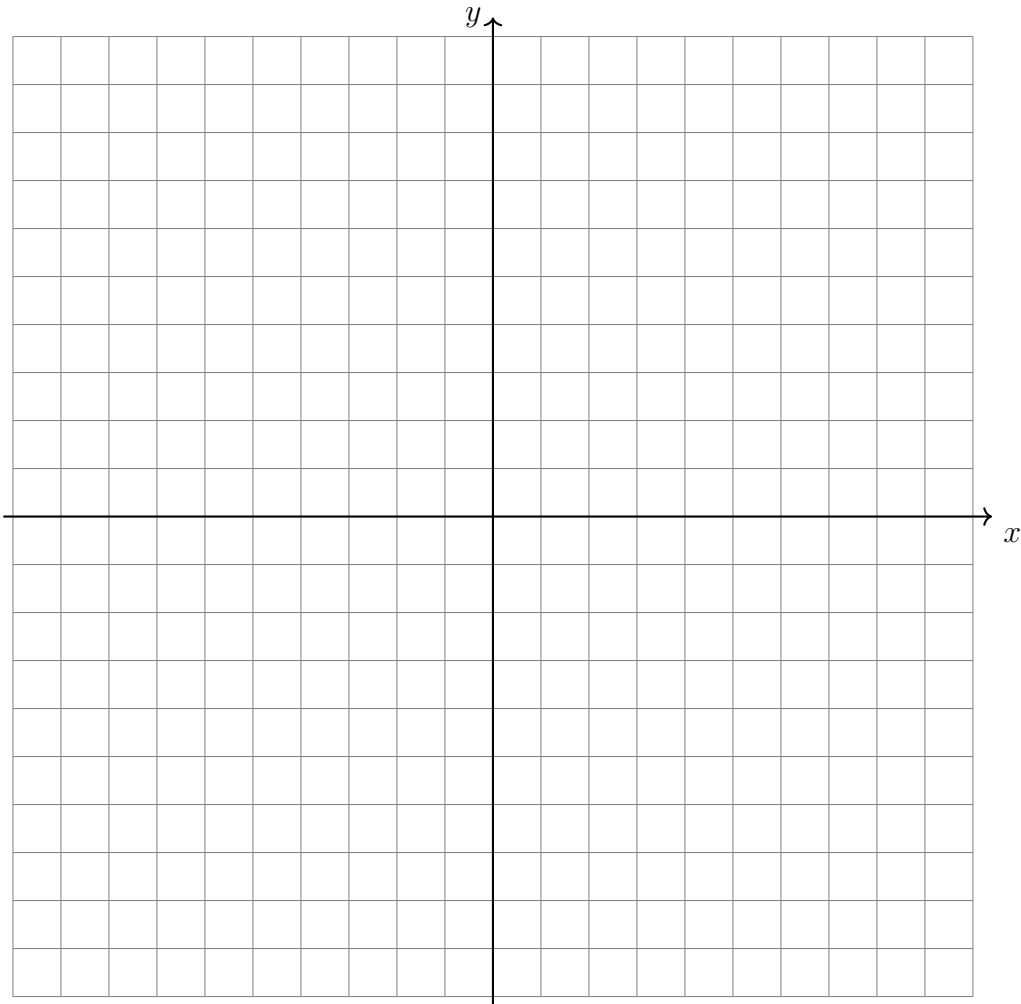
Complete the two values in the table.

$x$	$y$
0	_____
_____	0

(a)  $m =$

(b)  $b =$

Write as slope-intercept form,  $y = mx + b$ .



2. In the following problems, solve for the value of  $x$ , then check your answer.

(a)  $3x + 4 = x + 10$

(d)  $\frac{1}{3}(x - 6) = 2$

(b)  $\frac{5}{6}x = 10$

(e)  $\frac{1}{4}x - 5 = -3$

(c)  $4x - 5 = x + 7$

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

3. Given the linear function  $f(x) = \frac{3}{4}x + 4$ .

(a) Find  $f(\frac{2}{3})$

(b)  $f(x) = 10$ . Find  $x$ .