

2.5 Slope-Int $\Rightarrow y = mx + b$

$$2) \quad 2x + y = 17$$

$$\begin{array}{r} -2x \qquad -2x \\ \hline y = -2x + 17 \end{array}$$

$m = -2 \quad b = 17$

$$9) \quad 15x - 12y = 60$$

$$\begin{array}{r} y\text{-Int} \qquad x\text{-Int} \\ -12y = 60 \qquad 15x = 60 \\ y = -5 \qquad x = 4 \end{array}$$

$$10) \quad 5x + 4y = 20$$

$$\begin{array}{r} y\text{-Int} \qquad x\text{-Int} \\ 4y = 20 \qquad 5x = 20 \\ y = 5 \qquad x = 4 \end{array}$$

$$11) \quad 10x + 8y = -40$$

$$\begin{array}{r} y\text{-Int} \qquad x\text{-Int} \\ 8y = -40 \qquad 10x = -40 \\ y = -5 \qquad x = -4 \end{array}$$

$$12) \quad \begin{array}{r} 3x - 4y = -12 \\ -3x \qquad -3x \\ \hline \end{array}$$

$$\frac{-4y}{-4} = \frac{-3x - 12}{-4}$$

$$y = \frac{3}{4}x + 3$$

$$m = \frac{3}{4} \quad b = 3$$

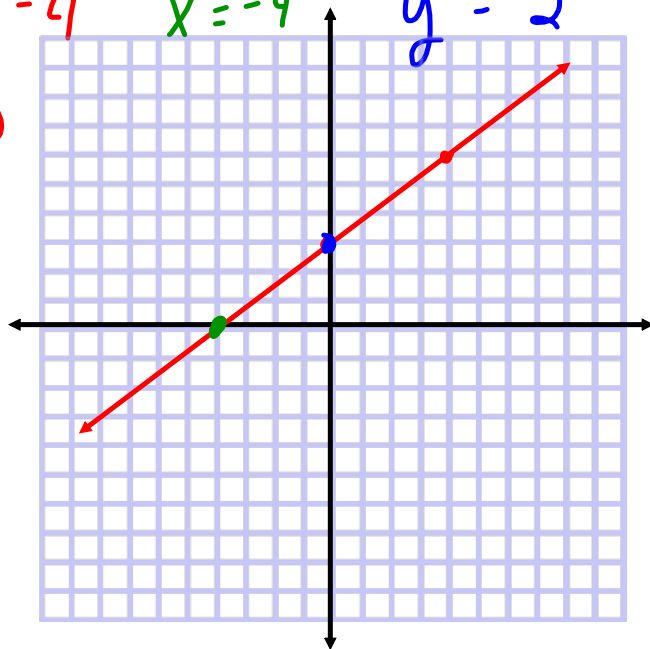
$$3x - 4y = -12$$

$$x\text{-Int} \quad y\text{-Int}$$

$$3x = -12 \quad -4y = -12$$

$$x = -4$$

$$y = 3$$



$$13) 2x + 4y = 8$$

 $x\text{-Int}$ $y\text{-Int}$

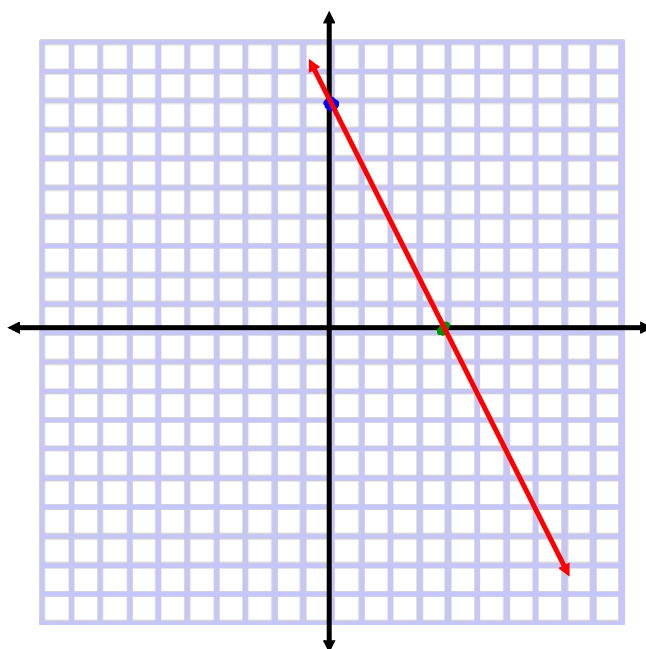
$$2x = 8$$

$$y = 8$$

$$x = 4$$

$$(0, 8)$$

$$(4, 0)$$



$$14) \frac{1}{3}x - \frac{1}{6}y = -\frac{2}{3}$$

X-Int

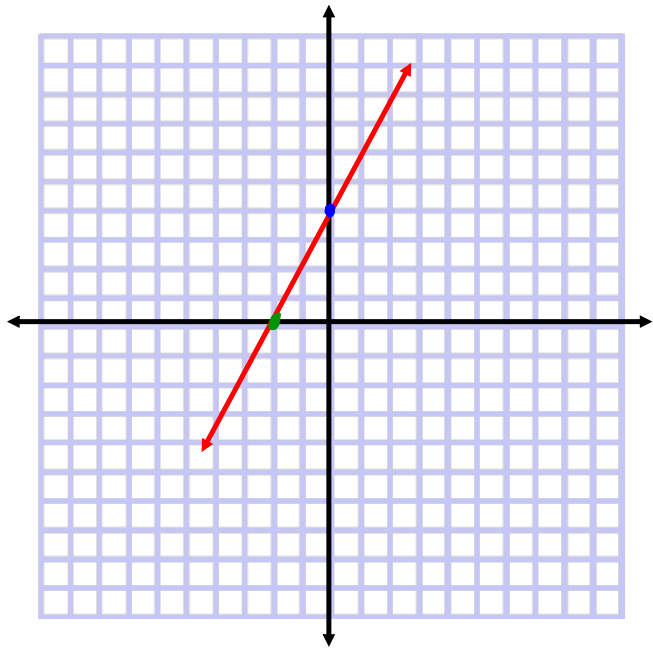
y-Int

$$\frac{1}{3}x = -\frac{2}{3}$$
$$\frac{1}{3} \quad \frac{1}{3}$$

$$x = -2$$

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

$$y = 4$$



$$15) 4x - 5 = 11$$

X-Int

Y-Int

$$4x - 5 = 11$$

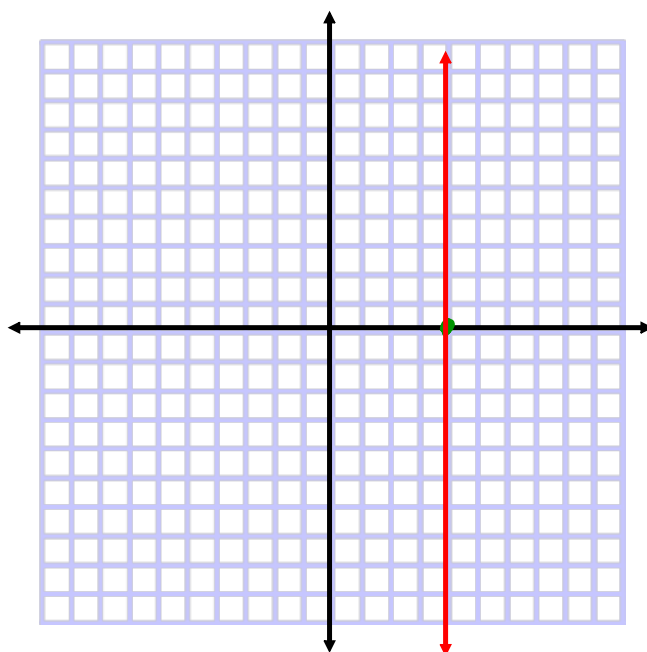
$$+5 \quad +5$$

$$\hline 4x = 16$$

$$\frac{4x}{4} = \frac{16}{4}$$

$$x = 4$$

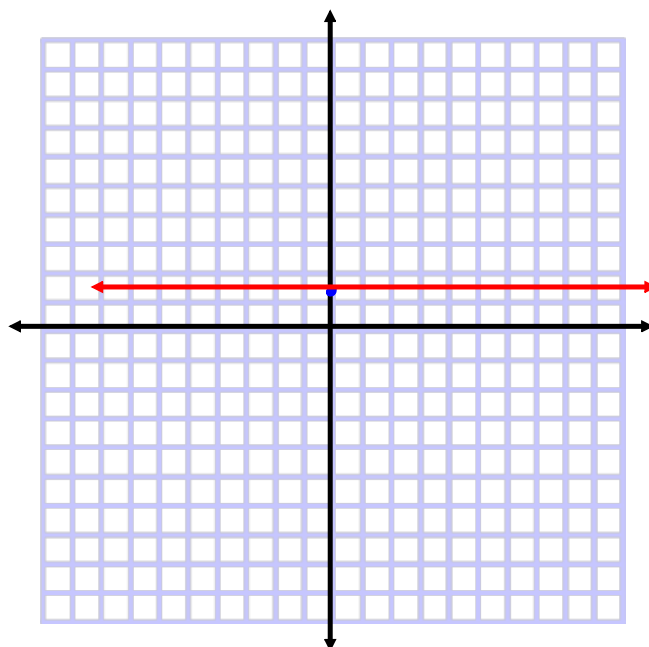
None



$$16) -16y = -24$$

X-Int y-Int

$$\begin{array}{l} \text{None} \\ \hline -16y = -24 \\ \hline -16 \quad -16 \\ y = \frac{3}{2} \end{array}$$



$$17) -x + 8y = 2$$

x-Int y-Int

$$-x = 2$$

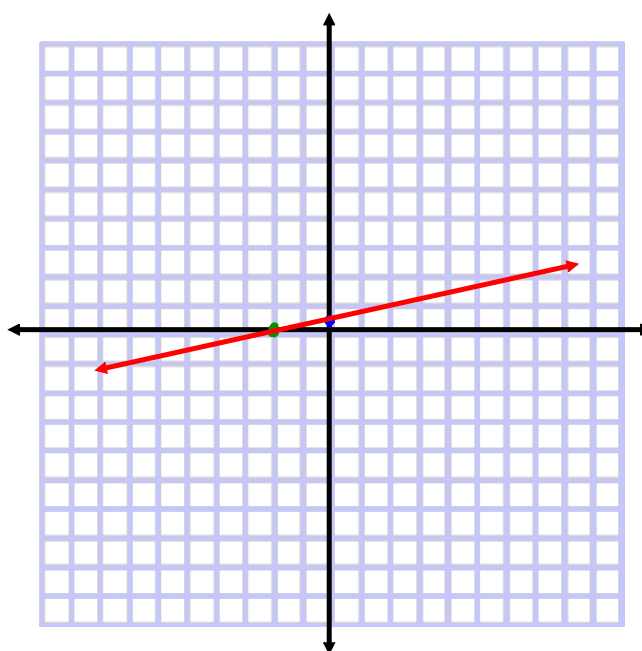
$$x = -2$$

$$(-2, 0)$$

$$\frac{8y}{8} = \frac{2}{8}$$

$$y = \frac{1}{4} \text{ or } .25$$

$$(0, \frac{1}{4})$$



$$19) -5x + 4y = 20$$

X-Int

$$-5x = 20$$

$$x = -4$$

$$(-4, 0)$$

y-Int

$$4y = 20$$

$$y = 5$$

$$(0, 5)$$

$$25) y = 5x + 14$$

$$y = 3x + 20$$

$$5x + 14 = 3x + 20$$

$$\begin{array}{r} -3x \\ \hline \end{array}$$

$$2x + 14 = 20$$

$$\begin{array}{r} -14 \quad -14 \\ \hline \end{array}$$

$$2x = 6$$

$$\frac{2x}{2} = \frac{6}{2}$$

$$x = 3$$