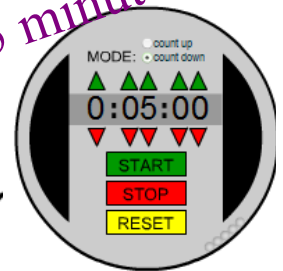


$$y = mx + b$$



Find the **y-intercept** and the **slope** for each of the following.

You have
5 minutes.



a) $5y - 10 = 15x - 30$

b) $4(x + 3) + 2y = 11$

c) $2(y - 7) + 2 = 3(x - 4) + y$

2

y-int.: -4

slope: 3

$$\begin{aligned} \text{a) } 5y - 10 &= 15x - 30 \\ 5y &= 15x - 30 + 10 \\ 5y &= 15x - 20 \\ y &= 3x - 4 \end{aligned}$$

3

$$\text{y-int.: } \underline{-1/2}$$

$$\text{slope: } \underline{-2}$$

$$\text{b) } 4(x+3)+2y=11$$

$$4x+12+2y=11$$

$$2y=11-4x-12$$

$$2y=-4x-1$$

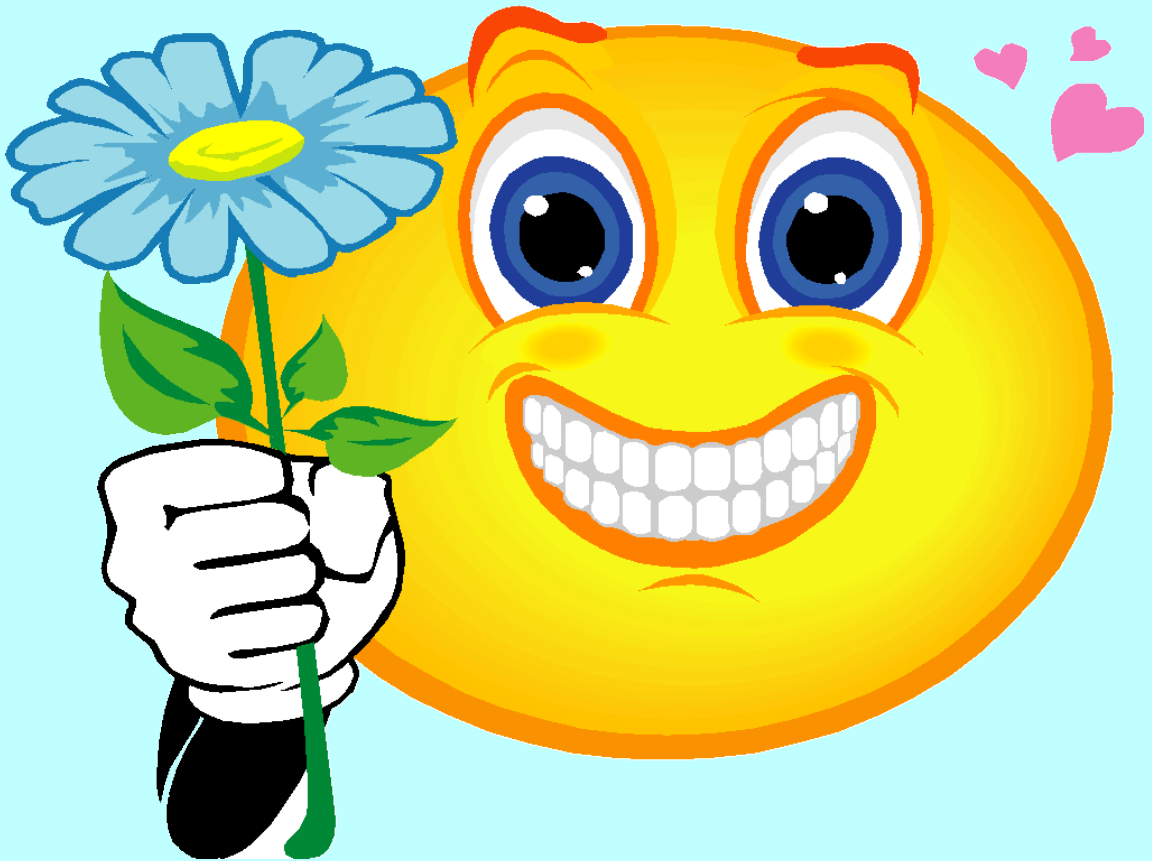
$$y=-2x-\frac{1}{2}$$

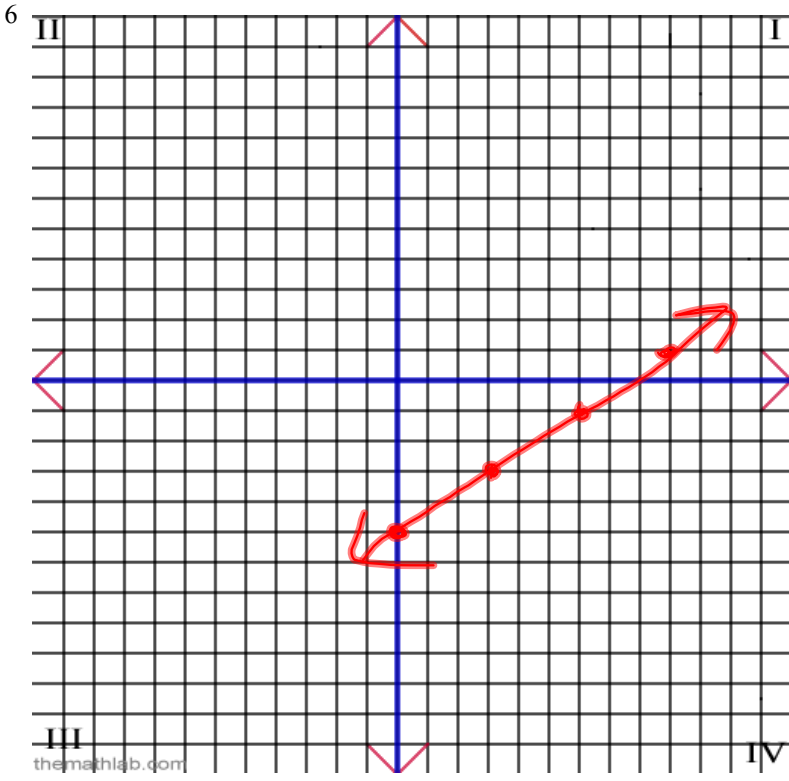
y-int.: 0slope: 3

c) $2(y-7)+2=3(x-4)+y$
 $2y-14+2=3x-12+y$
 $2y-y=3x-12+14-2$
 $y=3x+0$
 $y=3x$

Click on the flower.

Check this out!!!

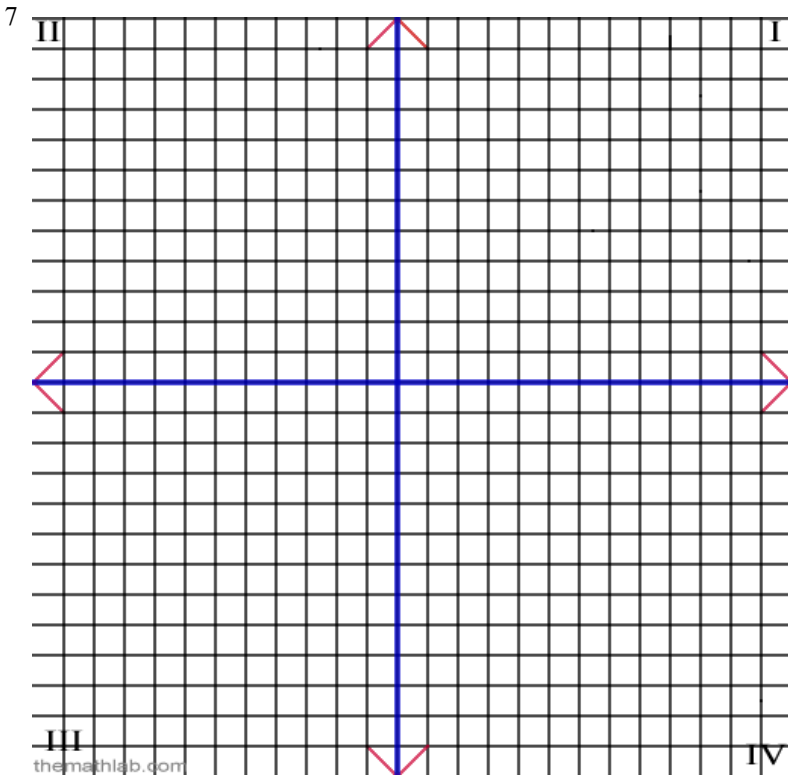




GRAPH

$$y = \frac{2}{3}x - 5$$

Start
 ↓
 y-int.: -5
 slope: $\frac{2}{3}$



$$\frac{4 \times 6}{3}x + \frac{1 \times 6}{2}y = \frac{1 \times 6}{3}$$

$$\frac{24x}{3} + \frac{6y}{2} = \frac{6}{3}$$

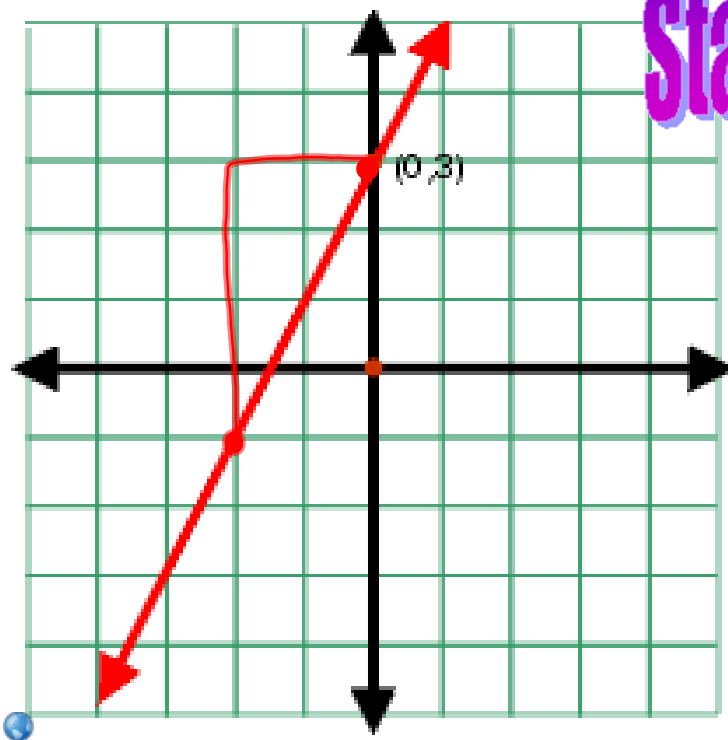
$$8x + 3y = 2$$

$$\frac{3y}{3} = \frac{-8x + 2}{3}$$

$$y = \frac{-8}{3}x + \frac{2}{3}$$

y-int.: _____

slope: _____



State the equation!

y-int.: 3

slope: $\frac{4}{2} = 2$

equation: $y = 2x + 3$

$y = mx + b$