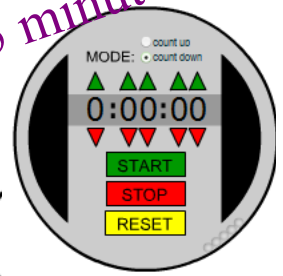


$$y = mx + b$$



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

You have  
5 minutes.



a)  $5y - 10 = 15x - 3$

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

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

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

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

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

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

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

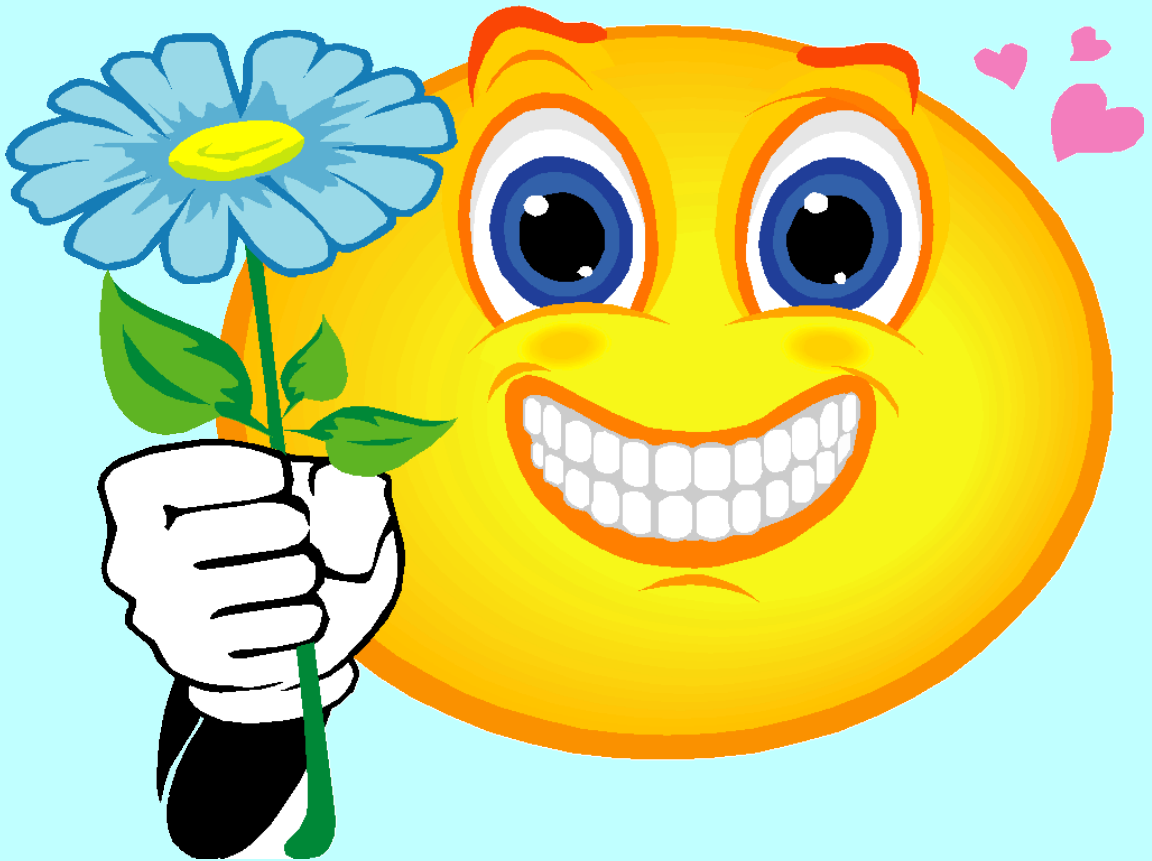
$$y=-2x-\frac{1}{2}$$

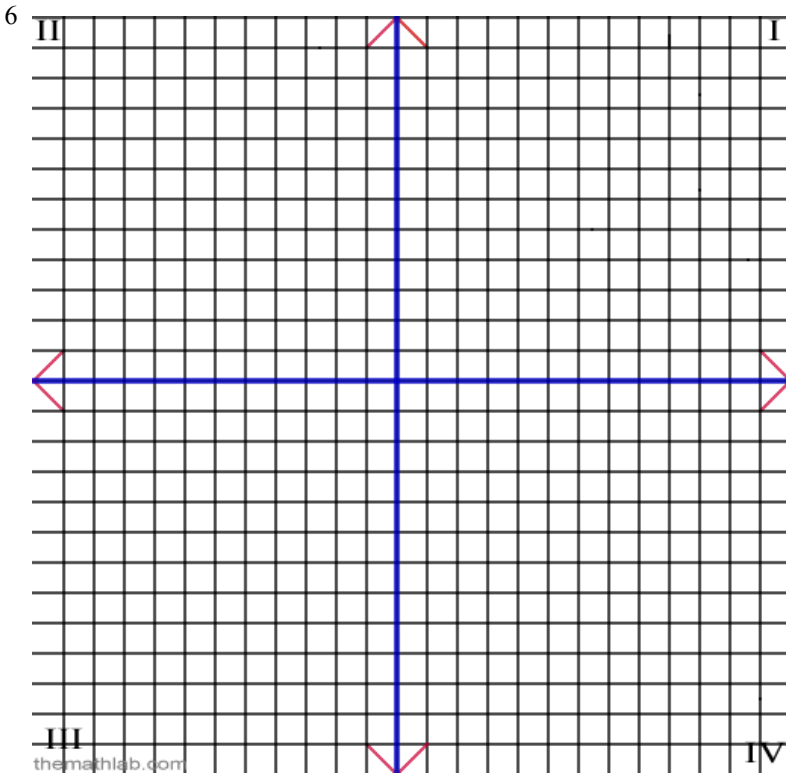
$$\begin{aligned} \text{y-int.: } & \underline{\quad 0 \quad} \\ \text{slope: } & \underline{\quad 3 \quad} \end{aligned}$$

$$\begin{aligned} \text{c) } & 2(y-7)+2=3(x-4)+y \\ & 2y-14+2=3x-12+y \\ & 2y-y=3x-12+14-2 \\ & y=3x+0 \\ & y=3x \end{aligned}$$

Click on the flower.

**Check this out!!!**





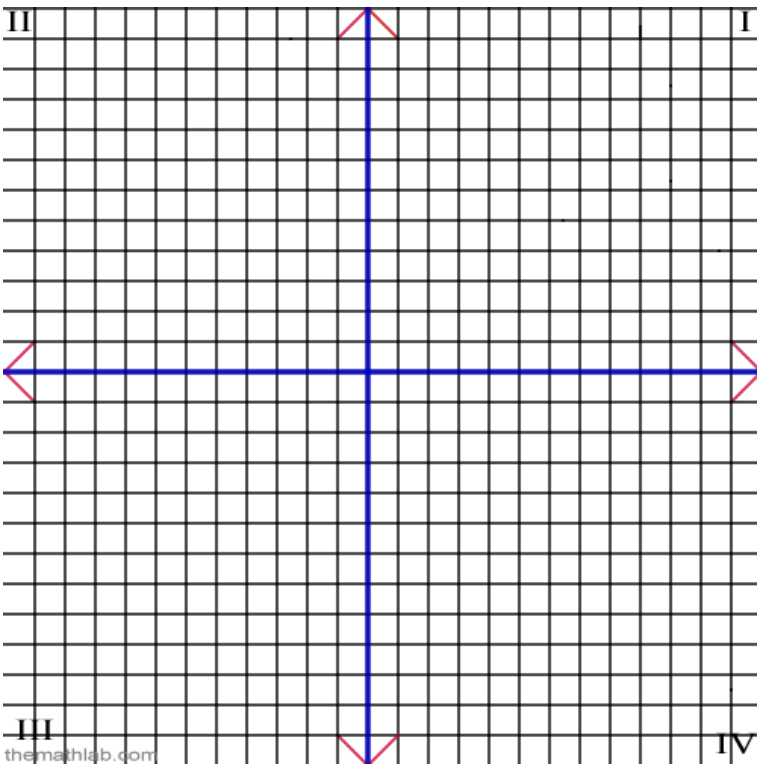
**GRAPH**

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

y-int.: \_\_\_\_\_

slope: \_\_\_\_\_

7



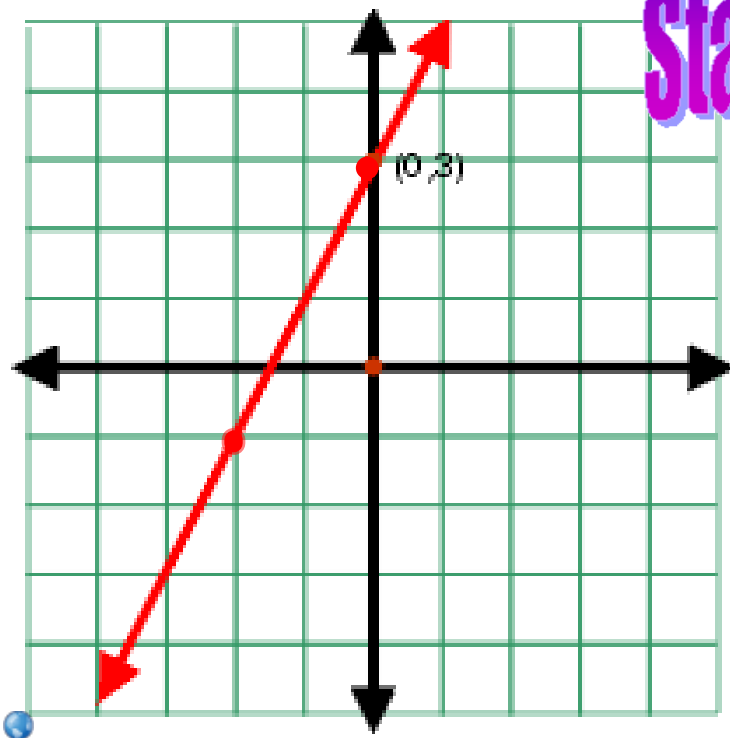
thematlab.com

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

y-int.: \_\_\_\_\_

slope: \_\_\_\_\_





**State the equation!**

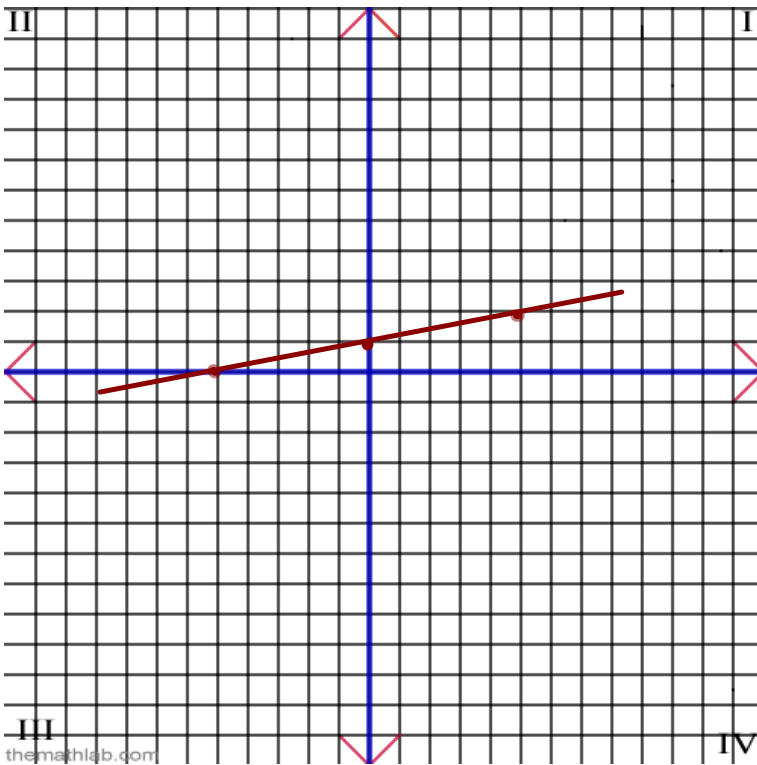
y-int.: \_\_\_\_\_

slope: \_\_\_\_\_

equation: \_\_\_\_\_

**$y=mx+b$**

9



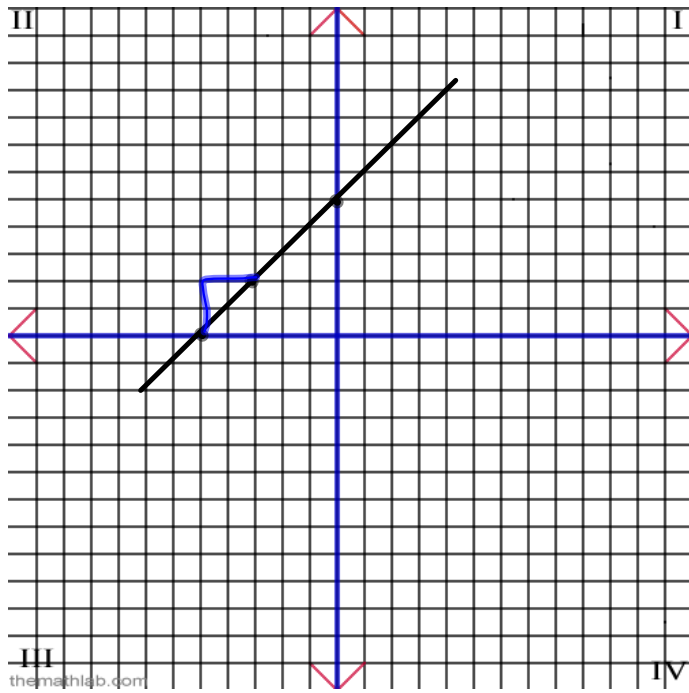
y-int.: \_\_\_\_\_

slope: \_\_\_\_\_

equation: \_\_\_\_\_

$$y=mx+b$$

10

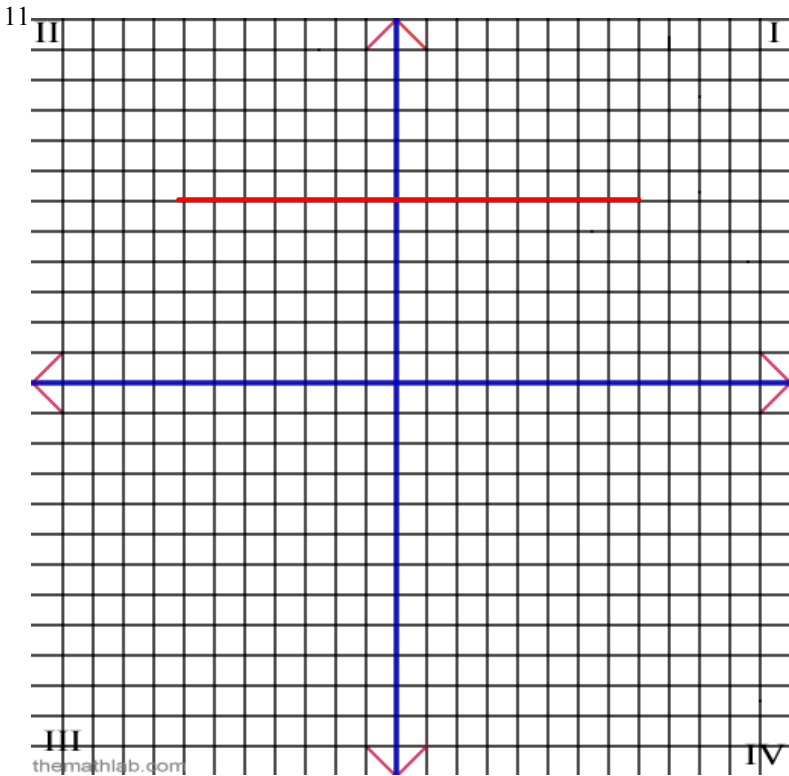


y-int.: 5

slope:  $\frac{\Delta y}{\Delta x} = 1$

equation:  $y = 1x + 5$

$$y = mx + b$$



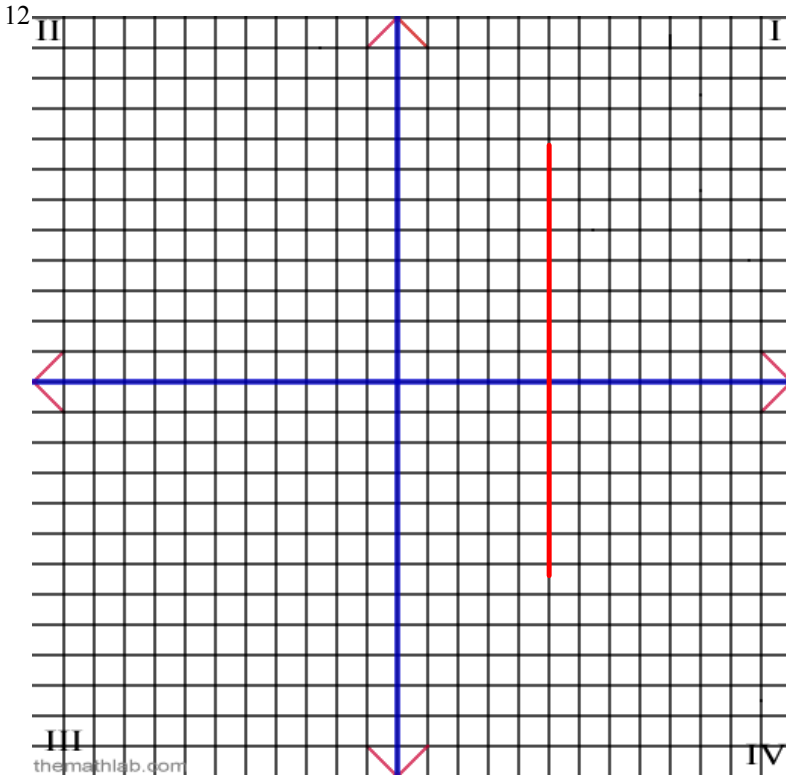
y-int.: 6

slope: 0

equation:  $y = 6$

**$y = mx + b$**

horizontal  $y = \#$



y-int.: None

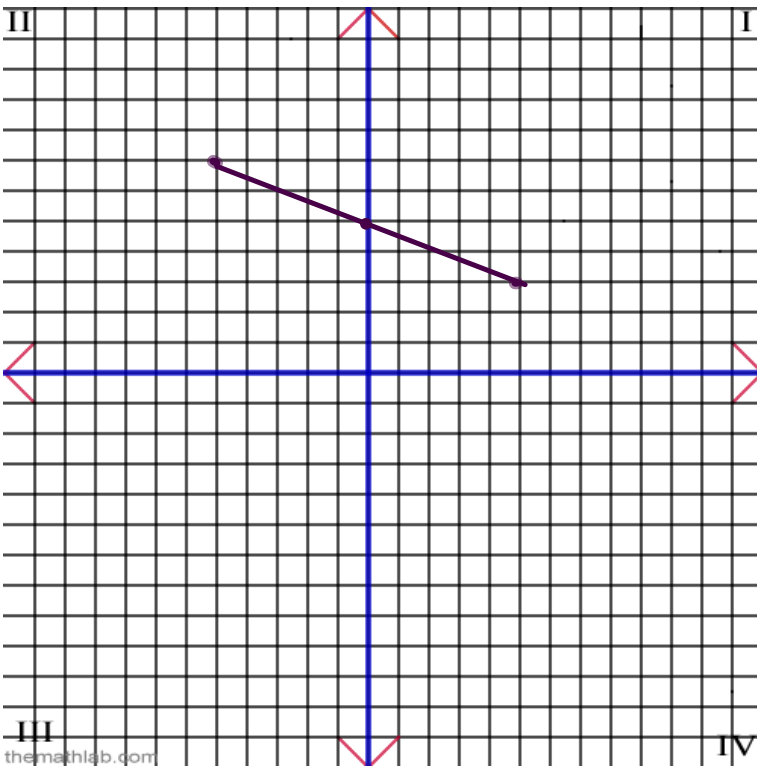
slope: Undefined  $\frac{1}{0}$

equation:  $X=5$

$$y=mx+b$$

Vertical  $X=\#$

13



y-int.: \_\_\_\_\_

slope: \_\_\_\_\_

equation: \_\_\_\_\_

$$y=mx+b$$

