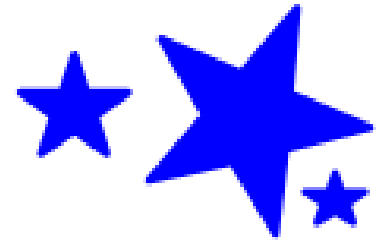


7 - 6

**Slope-Intercept Form
of a Line**

slope-intercept form:



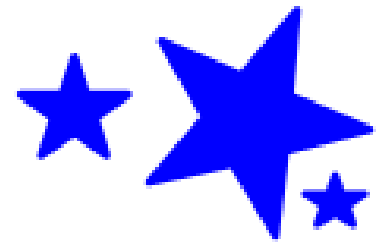
$$y = mx + b$$

m : slope

b : y-intercept

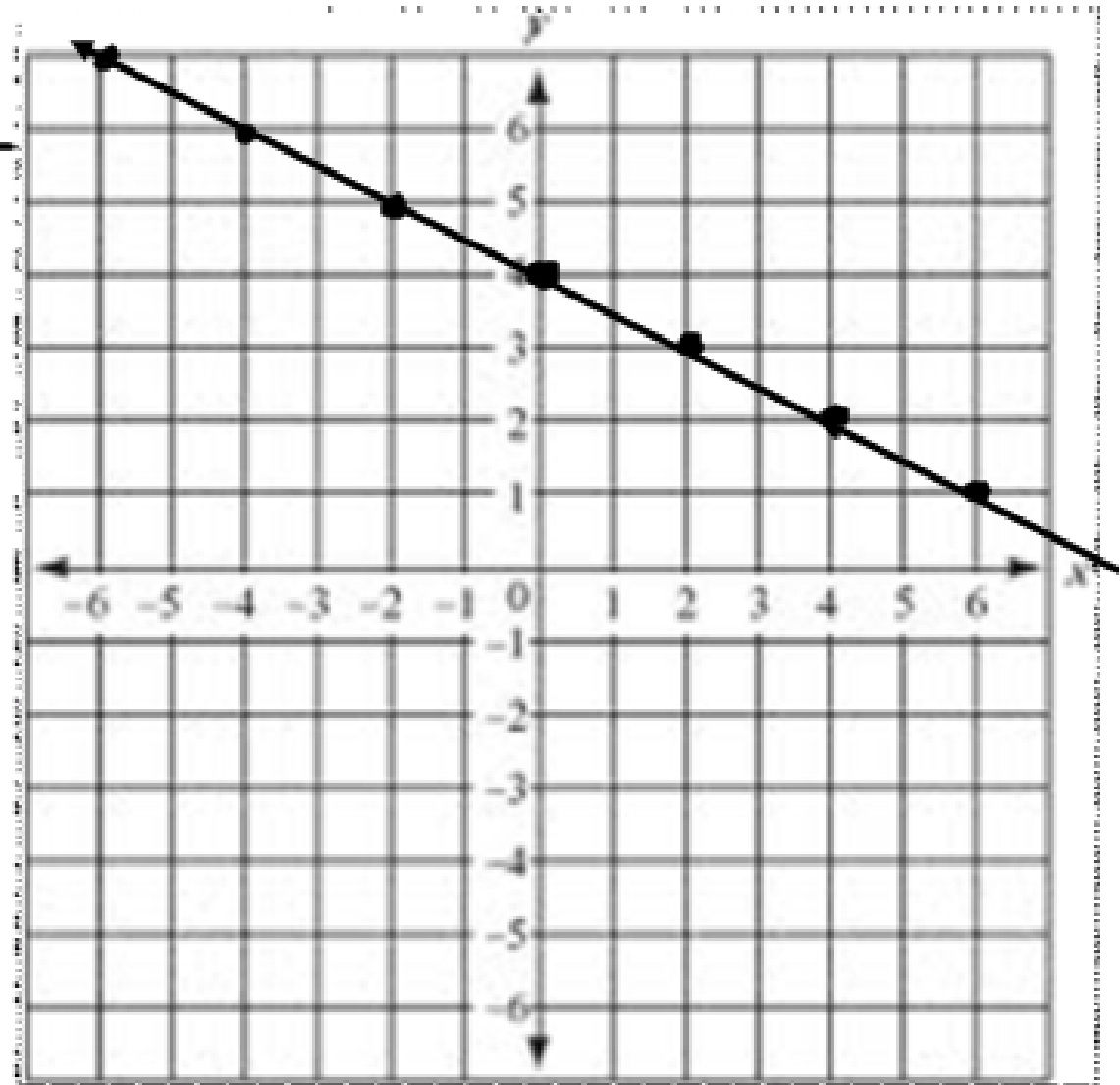
x, y stay variables

Ex: Find the slope and
y-intercept of $y = -\frac{1}{2}x + 4$
and then graph.

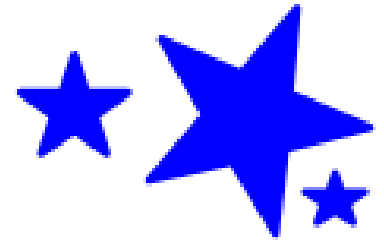


slope: $-\frac{1}{2}$ $\frac{-1}{2}$

y-intercept: 4

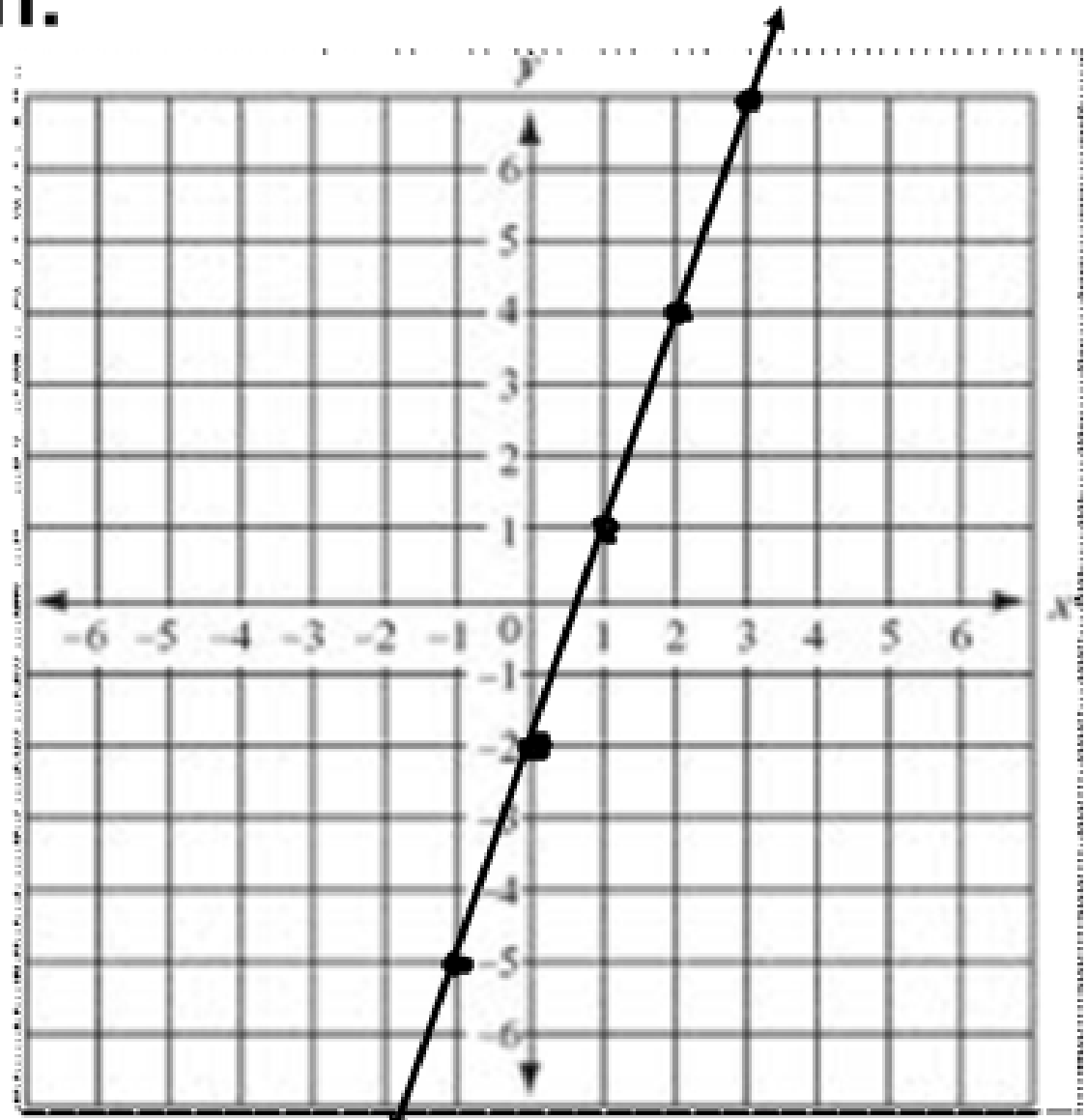


**Ex: Find the slope and
y-intercept of $y = 3x - 2$
and then graph.**




slope: $\frac{3}{1}$

y-intercept: -2



Ex: Find the slope and y-intercept of $y = 4$ and then graph.

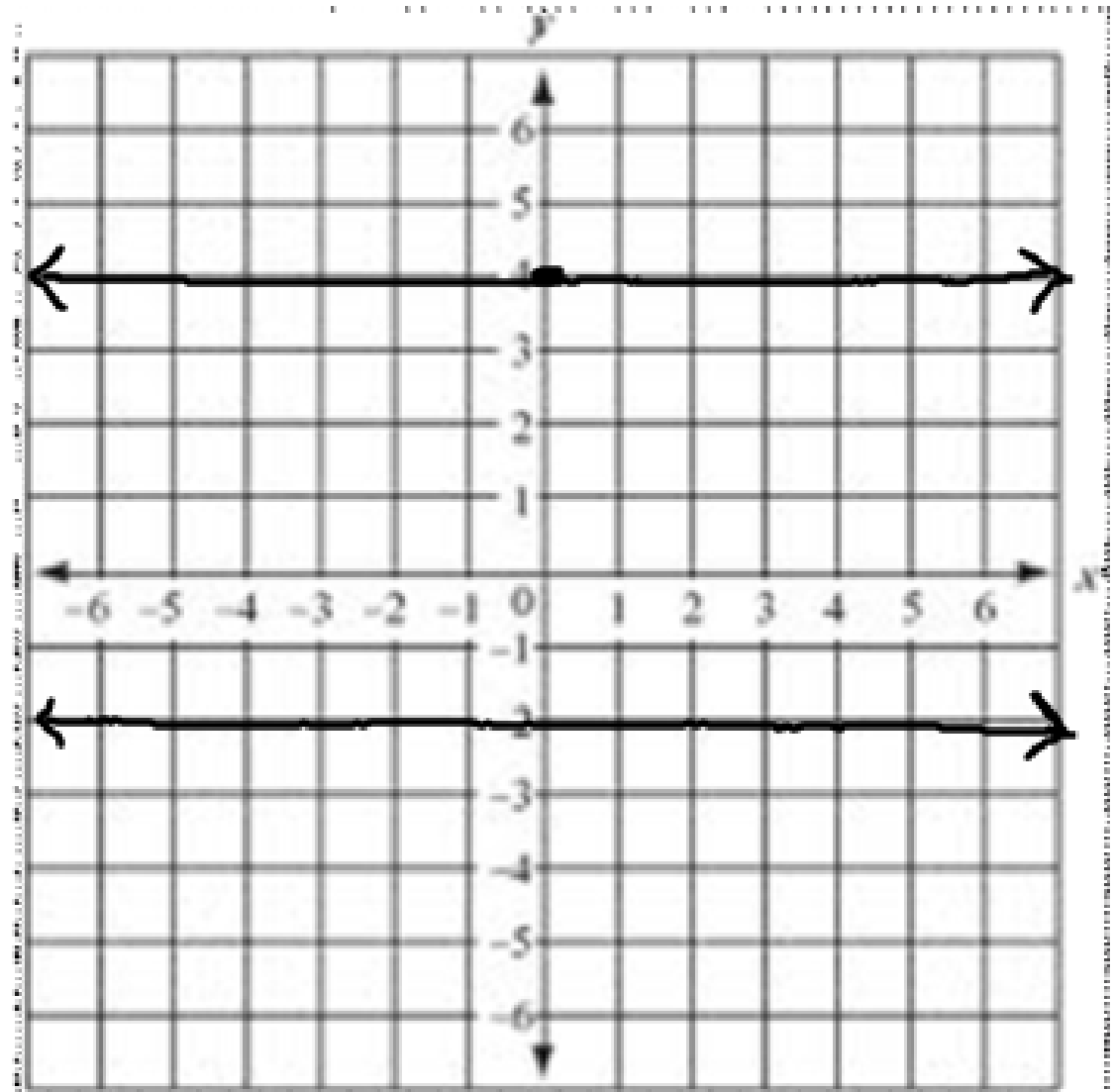
$y = 0$ 

slope: 0

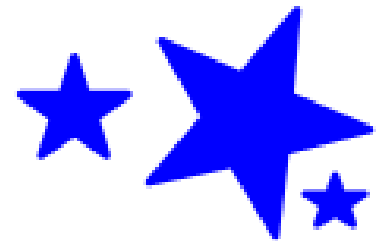
y-intercept: 4

$$y = 4 \quad y = -2$$

$$y = \cancel{0}x + 4$$



Ex: Find the slope and
y-intercept of $y = -2x$
and then graph.

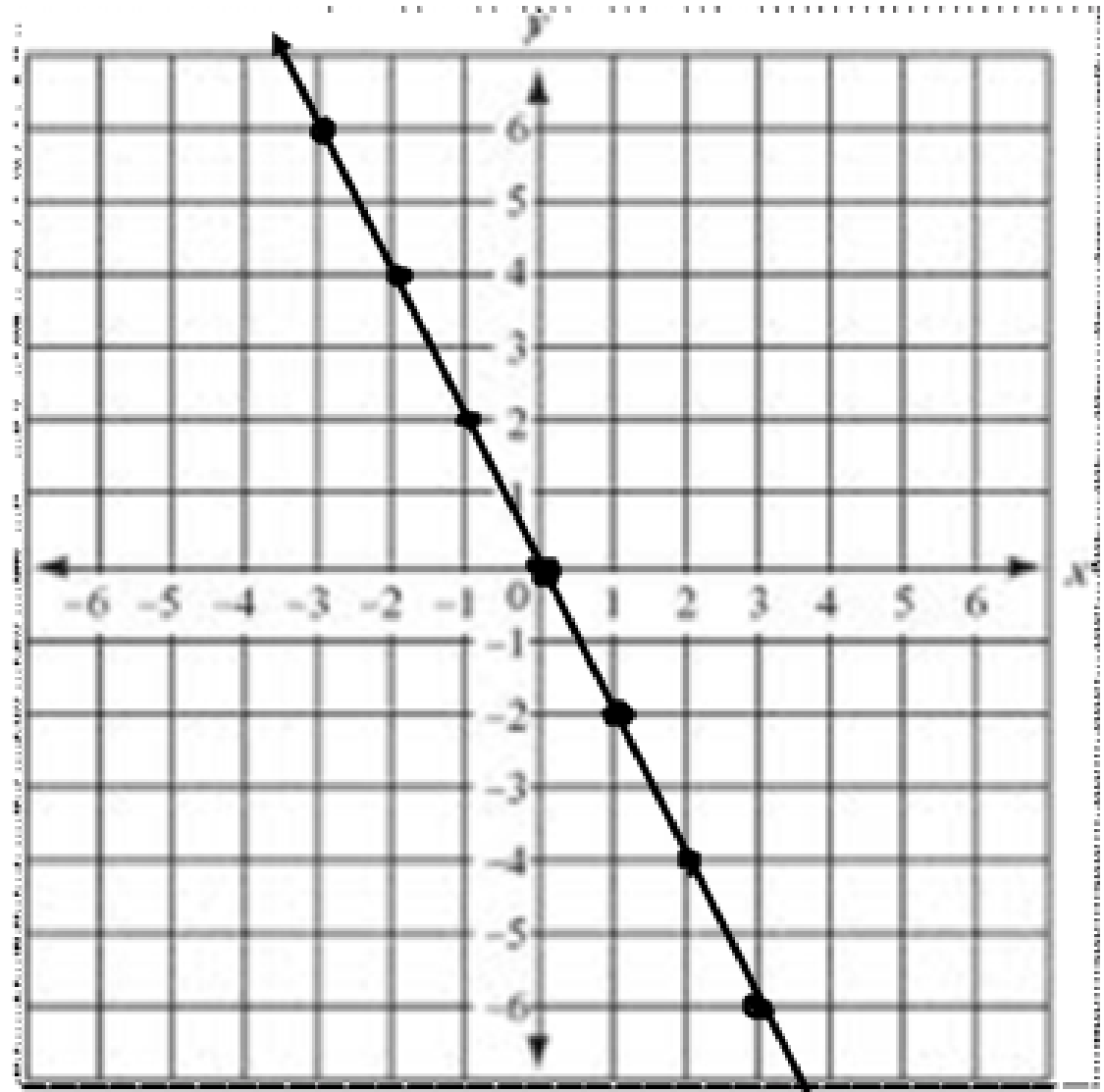


slope: $-\frac{2}{1}$

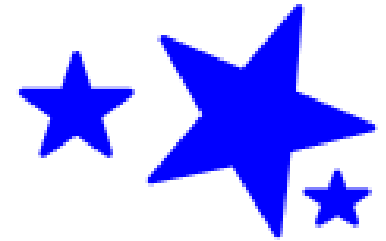
y-intercept: 0

$$y = -2x$$

$$y = -2x + 0$$

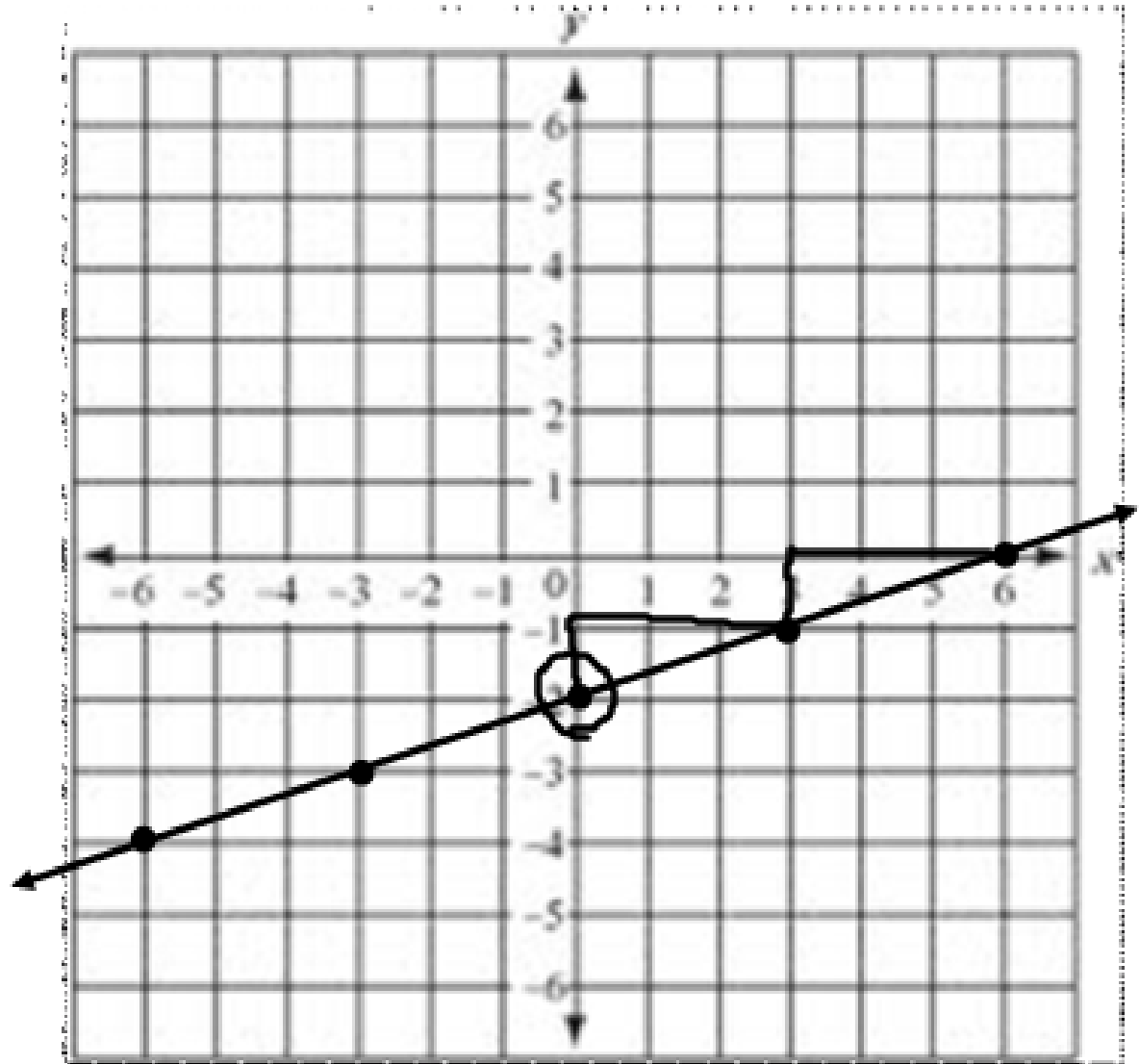


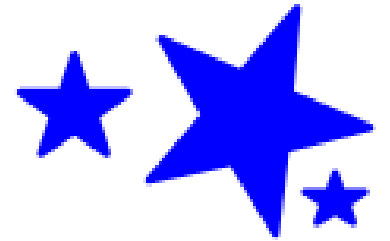
Ex: Write an equation of the line shown.



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

up 1
right 3 $\frac{1}{3}$





Homework:

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