

Section 5.3 – Notes/Examples – Given Graph, Write the equation in Slope-Intercept Form

- What is slope-intercept form? $y = mx + b$
- What information do we need to write it in this form? the slope & the y-intercept
- How do we get this information?

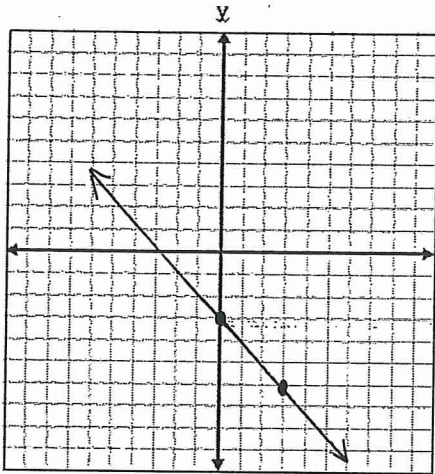
Slope:

count $\frac{\text{rise}}{\text{run}}$

y-int:

identify where the line crosses the y-axis

1.

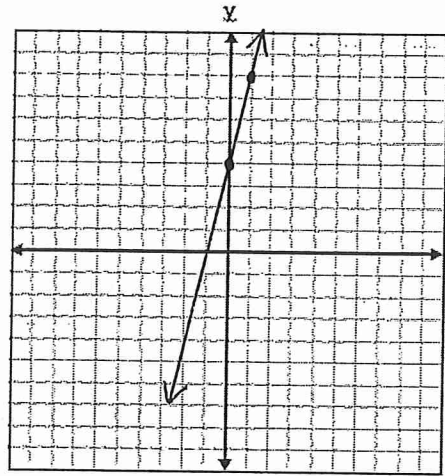


$$m = \frac{-3}{3} = -1$$

$$b = -3$$

Equation: $y = -x - 3$

2.

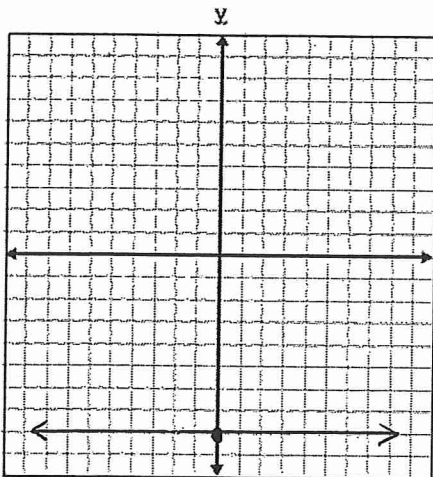


$$m = \frac{4}{1} = 4$$

$$b = 4$$

Equation: $y = 4x + 4$

3.

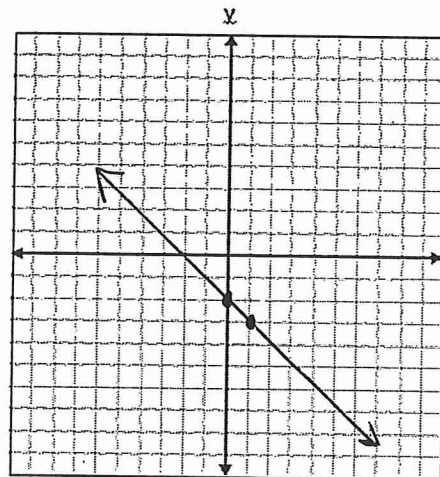


$$m = 0$$

$$b = -8$$

Equation: $y = -8$

4.

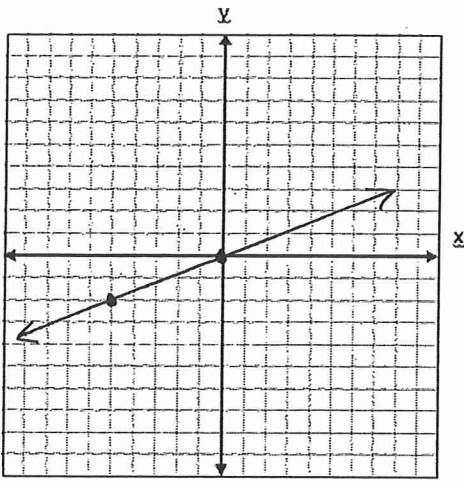


$$m = -1$$

$$b = -2$$

Equation: $y = -x - 2$

5.

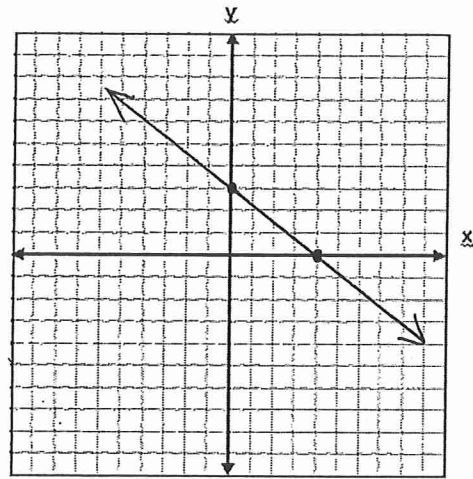


$$m = \frac{2}{5}$$

$$b = 0$$

Equation: $y = \frac{2}{5}x$

6.

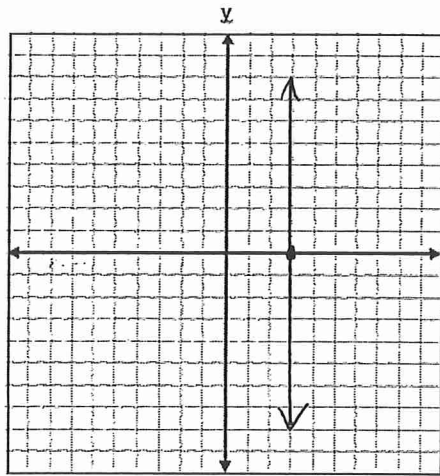


$$m = -\frac{3}{4}$$

$$b = 3$$

Equation: $y = -\frac{3}{4}x + 3$

7.



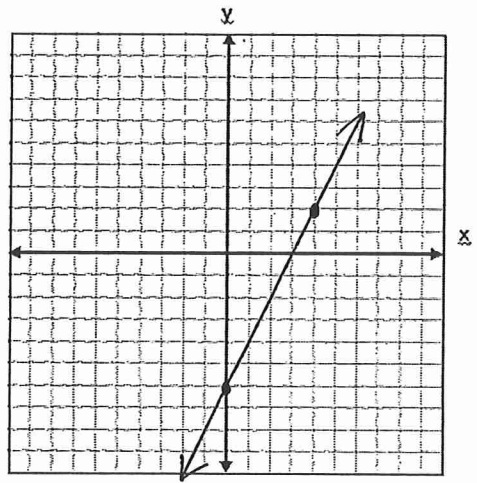
VUX

$$m = \text{und.}$$

$$b = \text{NONE}$$

Equation: $x = 3$

8.



$$m = \frac{6}{3} = 2$$

$$b = -6$$

Equation: $y = 2x - 6$