

**ALGEBRA II**  
**Chapter 2 section 3**  
**Graph Equations of Lines**  
**pg. 89**

**FOCUS:**

How do you graph a linear equation?

**VOCAB:**

*Parent Function:* \_\_\_\_\_

*y - intercept:* \_\_\_\_\_

*Slope - Intercept Form:* \_\_\_\_\_

*Standard form of a linear equation:* \_\_\_\_\_

*x - intercept:* \_\_\_\_\_

**WARM – UP:**

Evaluate each expression for  $x = -1, 0,$  and  $2.$

1.  $2x + 3$  \_\_\_\_\_

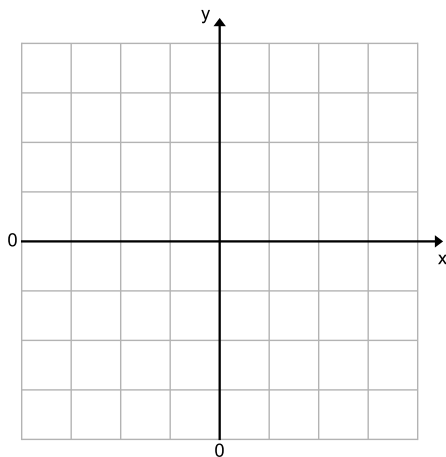
2.  $\frac{2}{3}x - 1$  \_\_\_\_\_

3. In 2005, Carey's Pet Shop had a profit of \$55,500. In 2006, profits were \$38,700. In a graph of the data, is the slope of the segment between 2005 and 2006 positive or negative?  
\_\_\_\_\_

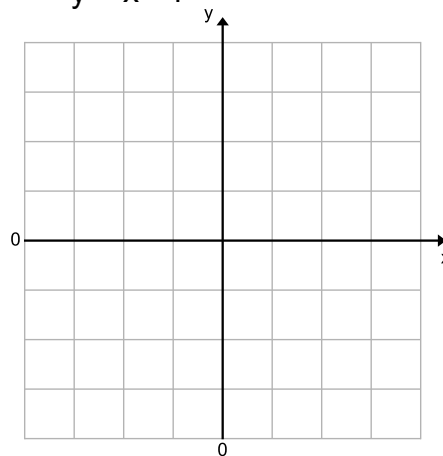
**NOTES:**

Graph the equation. Compare the graph with the graph of  $y = x.$

$y = -2x$

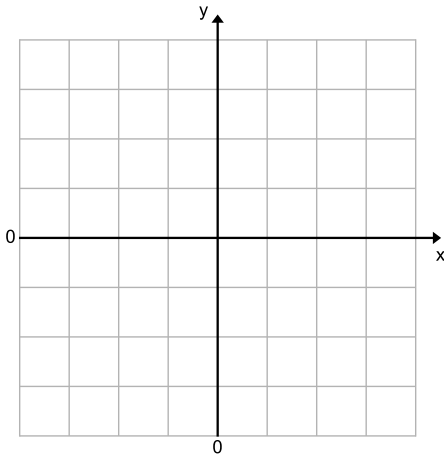


$y = x - 1$

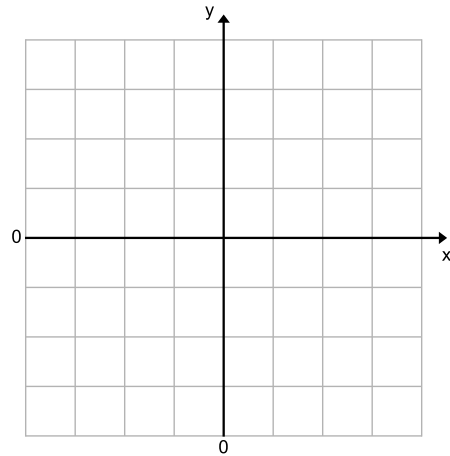


Graph.

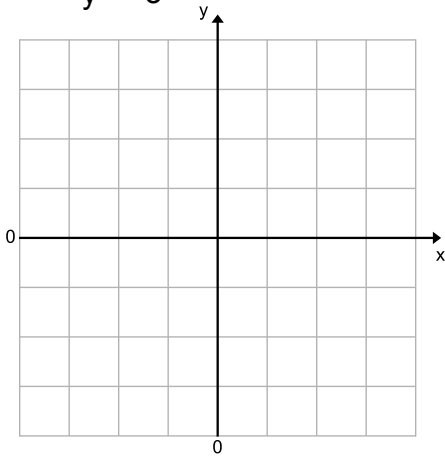
$$y = \frac{3}{4}x - 2$$



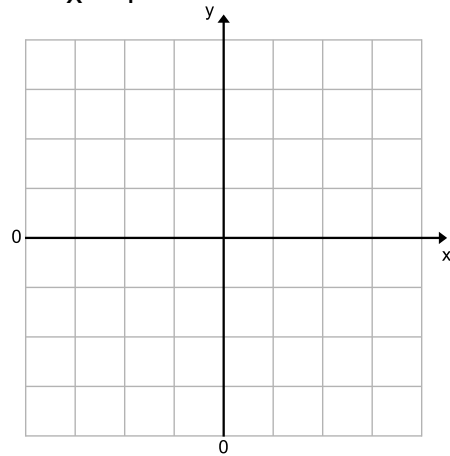
$$-2x - 3y = 6$$



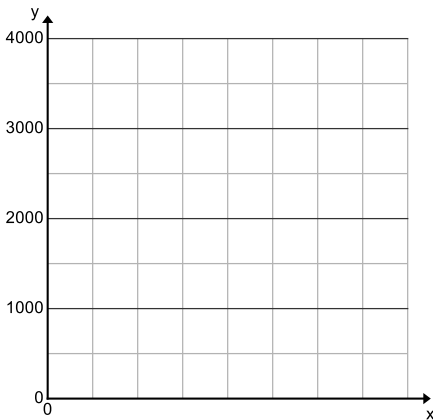
$$y = -3$$



$$x = 4$$



The value  $y$  of a copier  $x$  years after it was purchased can be modeled by the equation  $y = 4000 - 600x$ . Graph the equation. Describe what the  $y$ -intercept and slope represent in this situation. Use the graph to estimate the value of the copier after 5 years.



Let's see if you comprehended what we worked on in class...

Try \_\_\_\_\_ for homework