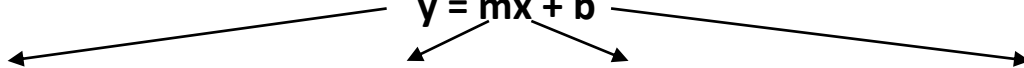


**U11-4 Graphing lines using  $y = mx + b$**

Linear equation

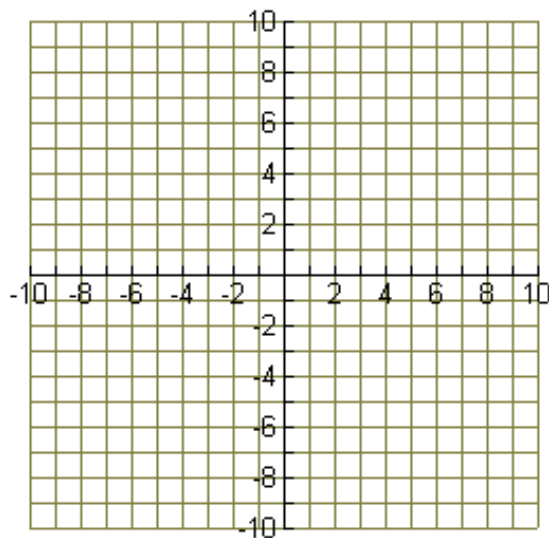
**$y = mx + b$**



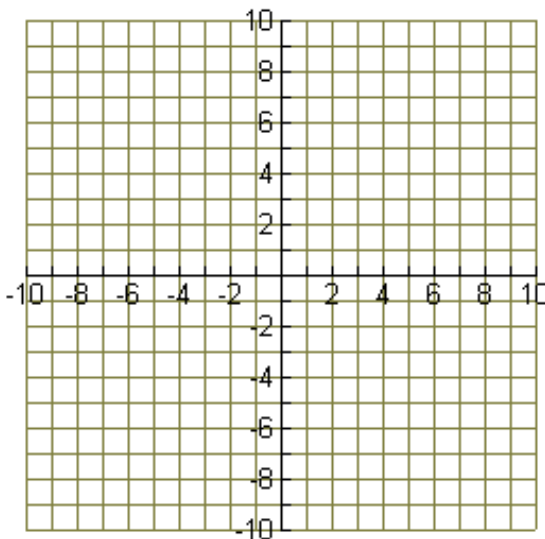
y	m	x	b
	_____ = _____		

<b>Graphing using the slope and y-intercept:</b>	$y = \frac{-1}{3}x + 2$	m = _____	b = _____
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- 1) Start
- 2) Use  
  
(+) RISE → move up  
(-) RISE → move down
- 3) Repeat
- 4) Draw

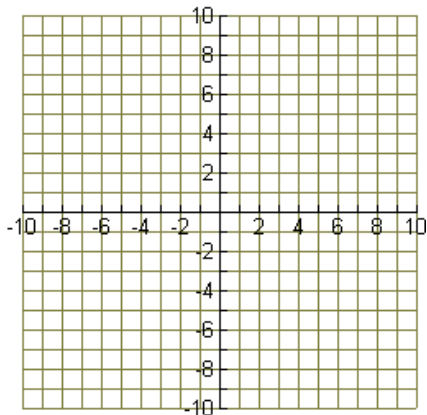


**Example 2**  
 $y = -3x + 6$   
 m = \_\_\_\_\_ b = \_\_\_\_\_  
 If "m" is an integer, **make it a fraction** by putting it over 1.

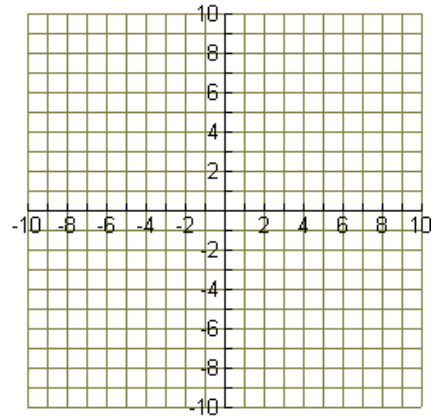


Identify the slope (m) and y-intercept (b) of the following lines then graph.

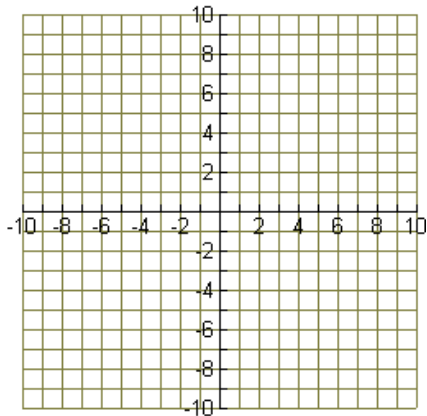
1)  $y = -3x + 4$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$



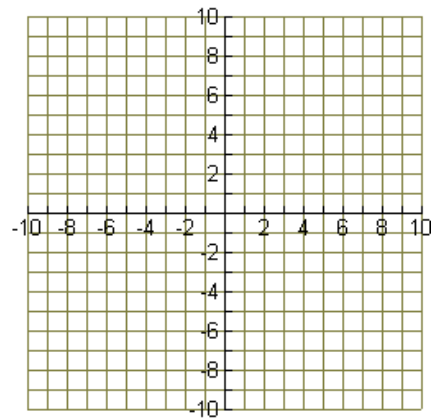
2)  $y = \frac{1}{2}x - 5$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$



3)  $y = 2x + 2$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$

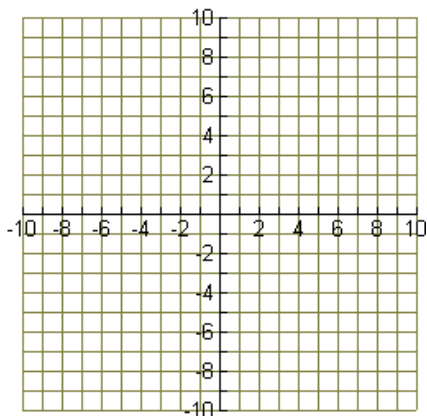


4)  $y = \frac{-2}{3}x + 1$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$



5)  $y = 2x$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$

**No y-intercept?** Make it                     



6)  $y = 5$        $m = \underline{\hspace{2cm}}$     $b = \underline{\hspace{2cm}}$

**No Slope?** Make it                     

