



Find the Equation using Slope and Intercept

Name _____

Date _____

Directions: Write the equation of a line in slope-intercept form given slope and y-intercept.

Example: Write the equation of a line with a slope of 4 and a y-intercept of -6.

Use slope-intercept form with $m = 4$ and $b = -6$. $y = mx + b \rightarrow y = 4x + (-6)$ or $y = 4x - 6$

1. $m = 3, b = 0$

2. $m = \frac{3}{2}, b = -2$

3. $m = -\frac{4}{5}, b = 4$

Directions: Write the equation of the line in slope-intercept form given the graph.

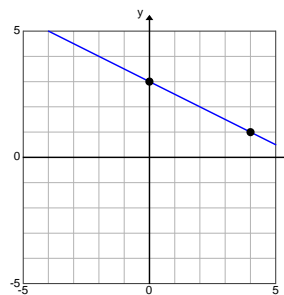
Example: Write the equation of the line shown in the graph.

The y-intercept is 3, as seen in the graph. **To find the slope, use the two points shown in the graph.**

Starting from the point on the left, we would step down 2 and right 4, so the slope is $\frac{-2}{4} = \frac{-1}{2}$.

Use slope-intercept form with $m = \frac{-1}{2}$ and $b = 3$.

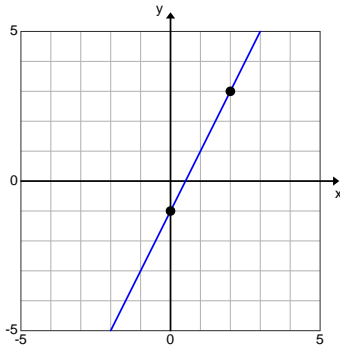
$$y = mx + b \rightarrow \boxed{y = \frac{-1}{2}x + 3.}$$



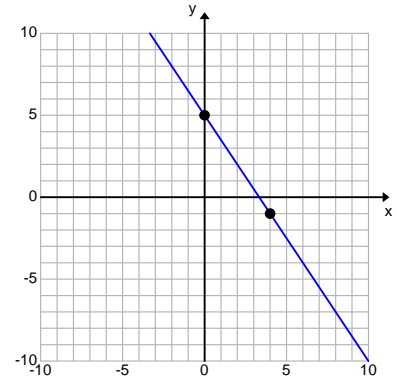


Directions: Write the equation of the line in slope-intercept form given the graph.

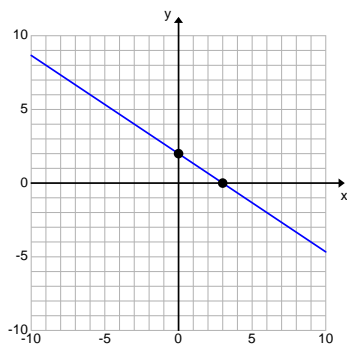
1.



2.



3.



4.

