

Objective 3 - Convert between a linear equation and its graph.

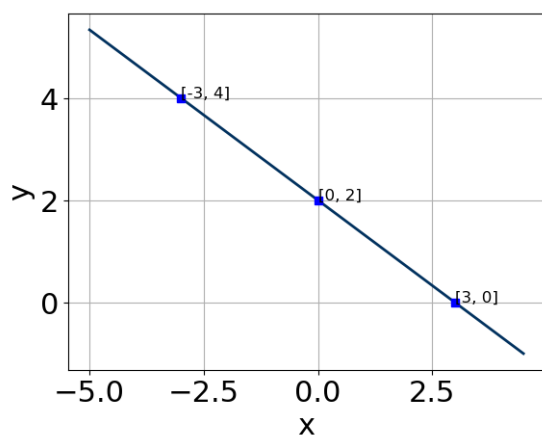
## Objective 3 - Convert between a linear equation and its graph.

*Constructing the linear equation based on its graph.*

[Link to section in online textbook.](#)

First, watch [this video](#) to learn how to convert from a graph to its linear function.

**Question 1** Write the equation of the line in the graph below in Slope-Intercept form and in Standard form.



Slope-Intercept form:  $y = \boxed{-2/3}x + \boxed{2}$

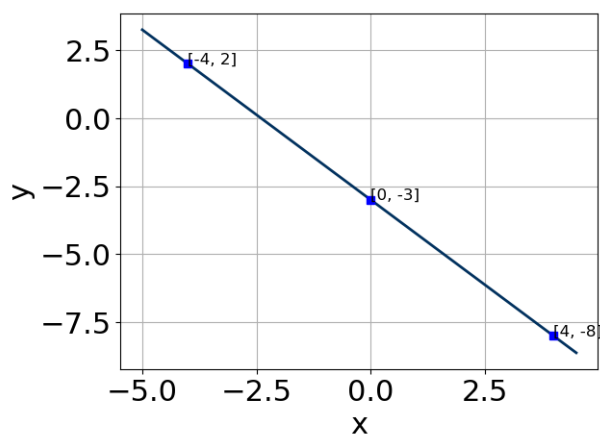
Standard form:  $\boxed{2}x + \boxed{3}y = \boxed{6}$

**Question 2** Write the equation of the line in the graph below in Slope-Intercept form and in Standard form.

Learning outcomes: Recognize and construct linear functions as well as solve linear equations.

Author(s): Darryl Chamberlain Jr.

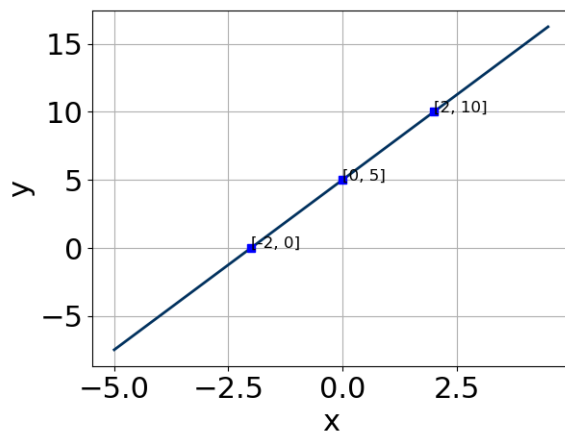
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Slope-Intercept form:  $y = \boxed{-5/4}x + \boxed{-3}$

Standard form:  $\boxed{5}x + \boxed{4}y = \boxed{-12}$

**Question 3** Write the equation of the line in the graph below in Slope-Intercept form and in Standard form.



Slope-Intercept form:  $y = \boxed{5/2}x + \boxed{5}$

Standard form:  $\boxed{5}x + \boxed{-2}y = \boxed{-10}$