

Course: Geometry
Unit: Lines and the Coordinate Plane
Section: Slope of a Line

Example: Slope of a Line on a Graph

Problem:

Find the slope of the line $5x - 9y = -6$, shown below.

Solution:

Notice that $(6, 4)$ and $(-3, -1)$ are two points on the line.

The first step in finding the slope is to determine the change in y . To find the change in y , find $y_2 - y_1$, which is the vertical distance between the points. $4 - (-1) = 5$. We call this the *rise*.

We can verify this by counting on the graph.

The next step in finding the slope is to determine the change in x . To find the change in x , find $x_2 - x_1$, which is the horizontal distance between the points. $6 - (-3) = 9$. We call this the *run*.

We can verify this by counting on the graph.

Recall that the slope is 'rise' over 'run'. Using the values we just found, the slope equals five-ninths.