Possible Solutions

The graph of a linear function is shown on the coordinate grid.



Determine the slope and the *y*-intercept.

Possible Solution 1

- When looking at the graph you can use the two points marked to determine the slope by counting the vertical change and compare it to the horizontal change $\left(\frac{rise}{run}\right)$.
- In this case the vertical change is 6 and the horizontal change is 4, so the slope is $\frac{6}{4} = \frac{3}{2}$.
- The line crosses the y axis at the point (0, -1.5) which is the *y*-intercept.
- The slope is $m = \frac{3}{2}$ and the *y*-intercept is (0, -1.5).

Possible Solution 2

• Use the slope formula to find the slope because two points are given in the problem.

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - (-3)}{3 - (-1)} = \frac{6}{4}$$

- The line crosses the *y*-axis at the point (0, -1.5) which is the *y*-intercept.
- The slope is $m = \frac{3}{2}$ and the *y*-intercept is (0, -1.5).