

7.5 Key Concepts 1 Equation of a Line Worked Example

Example: A line has a slope of 5 and a y -intercept of -4 . Write the equation of the line.

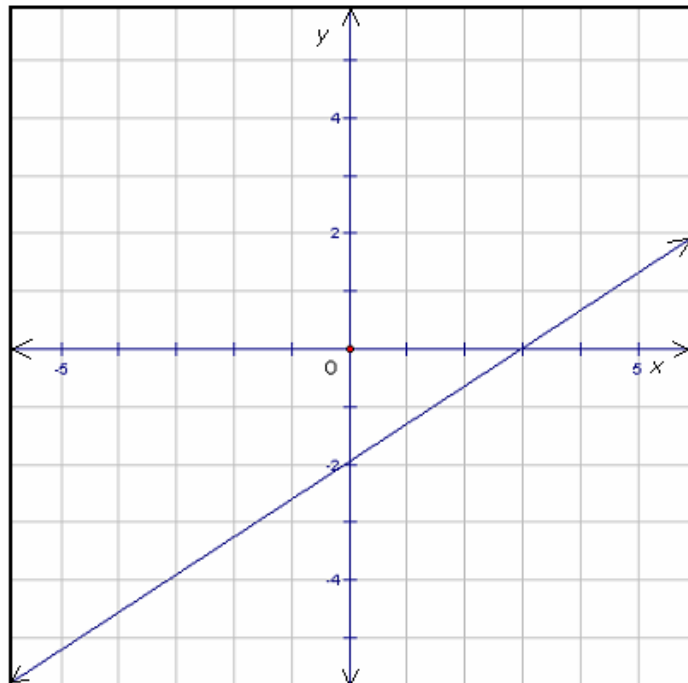
Solution: The slope-intercept form of the equation of a line is $y = mx + b$, where m is the slope, and b is the y -intercept. The equation of the line is

$$y = 5x - 4$$

Practice:

1. A line has a slope of -7 and a y -intercept of 6. Write the equation of the line.

2. Study the graph shown. Write the equation of the line.



Answers: 1. $y = -7x + 6$ 2. $y = \frac{2}{3}x - 2$