Exercise 81

For the following exercises, for each linear equation, a. give the slope m and y-intercept b, if any, and b. graph the line.

$$2x + 3y = 6$$

Solution

Solve the given equation for y.

$$3y = -2x + 6$$

$$y = -\frac{2}{3}x + 2$$

The general equation for a line is

$$y = mx + b$$
.

Comparing the coefficients, we have

$$m = -\frac{2}{3}$$

$$b = 2.$$

Below is a graph of the line.

