## Exercise 82

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

$$
6 x-5 y+15=0
$$

## Solution

Solve the given equation for $y$.

$$
\begin{aligned}
6 x+15 & =5 y \\
\frac{6}{5} x+3 & =y
\end{aligned}
$$

The general equation for a line is

$$
y=m x+b .
$$

Comparing the coefficients, we have

$$
\begin{aligned}
m & =\frac{6}{5} \\
b & =3 .
\end{aligned}
$$

Below is a graph of the line.


