## Exercise 10

For the following exercises, determine whether the equation of the curve can be written as a linear function.

$$
3 x+5 y=15
$$

## Solution

Solve the equation for $y$.

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

This equation is a linear function because it has the form,

$$
y=m x+b,
$$

where $m=-3 / 5$ and $b=3$.

