

## Exercise 11

For the following exercises, determine whether the relation represents  $y$  as a function of  $x$ .

$$3x^2 + y = 14$$

### Solution

Try to solve the equation for  $y$ , the output.

$$y = 14 - 3x^2$$

The relation  $3x^2 + y = 14$  is a function because for every input  $x$ , there's exactly one output given by  $y = 14 - 3x^2$ . This is reflected in the graph by the fact that any vertical line passes through the curve exactly once.

