## Exercise 21

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

$$
y=x^{3}
$$

## Solution

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


