## Exercise 2

Why do we restrict the domain of the function $f(x)=x^{2}$ to find the function's inverse?

## Solution

The function $f(x)=x^{2}$ is not a one-to-one function because the graph passes through a horizontal line more than once.


The way to make it a one-to-one function is to take the restriction of the function to $x \geq 0$.


