

Exercise 19

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

$$2xy = 1$$

Solution

Solve for y by dividing both sides by $2x$.

$$y = \frac{1}{2x}$$

The relation $2xy = 1$ is a function because for every input x , there's exactly one output given by $y = 1/(2x)$. This is reflected in the graph by the fact that any vertical line passes through the curve exactly once.

