

Exercise 24

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

$$y = \pm\sqrt{1-x}$$

Solution

The relation $y = \pm\sqrt{1-x}$ is not a function because for every input x , there are two outputs given by $y = \sqrt{1-x}$ and $y = -\sqrt{1-x}$. This is reflected in the graph by the fact that there are vertical lines that pass through the curve more than once.

