Exercise 17

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

$$y = \frac{3x + 5}{7x - 1}$$

Solution

The relation $y = (3x + 5)/(7x - 1)$ is a function because for every input x, there's exactly one output given by $y = (3x + 5)/(7x - 1)$. This is reflected in the graph by the fact that any vertical line passes through the curve exactly once.