Exercise 4
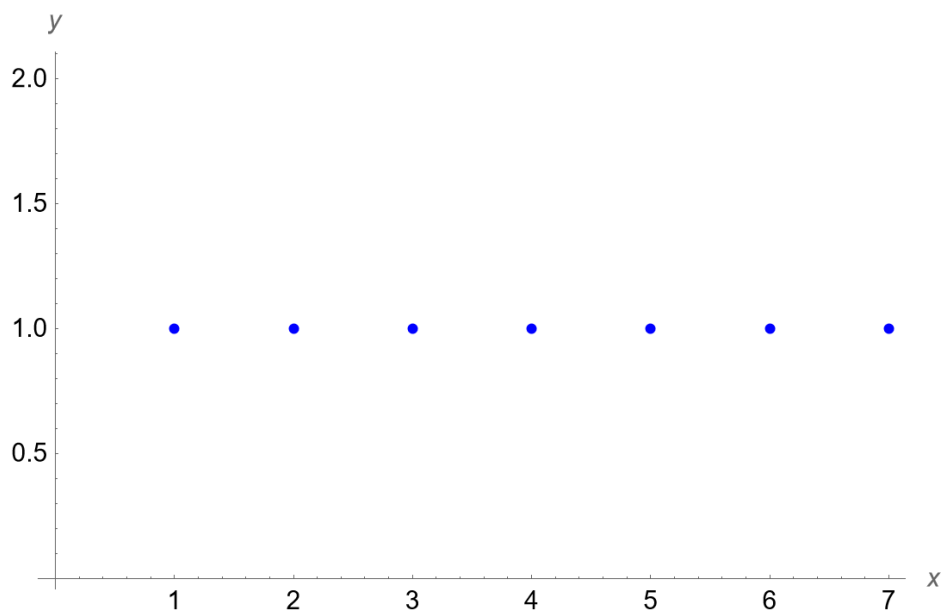
For the following exercises, (a) determine the domain and the range of each relation, and (b) state whether the relation is a function.

x	*y*	*x*	*y*
1	1	5	1
2	1	6	1
3	1	7	1
4	1		

Solution

Below is a plot of the data in this table.

Domain: $\{1, 2, 3, 4, 5, 6, 7\}$

Range: $\{1\}$

The relation is a function because every value of x corresponds with only one value of y; that is, it satisfies the vertical line test.