

The *domain* is the set of values on which a function operates. For instance, the domain of the square root function is usually taken to be the non-negative real numbers, while the domain of the function  $f(x) = \frac{1}{x}$  is usually taken to be all real numbers except for 0.

We can also specify different domains for these functions, such as defining a function  $g(x) = \frac{1}{x}$  on all positive real numbers, or on all real numbers between 2 and 10, or on all non-zero integers.