

Exercise 14

For the following exercises, find the domain of each function using interval notation.

$$f(x) = \frac{9}{x-6}$$

Solution

You cannot divide by zero, so it's necessary that

$$x - 6 \neq 0$$

Add 6 to both sides.

$$x \neq 6$$

Therefore, the domain is $(-\infty, 6) \cup (6, \infty)$. This is reflected in the graph of $f(x)$ versus x .

