

**Example 0.0.1** ( $f(x) = \frac{x-1}{x-1}$ )

-  $\lim_{x \rightarrow 1}$

**Example 0.0.2** (2)

$$g(x) = \begin{cases} x^2 & x \neq 2 \\ 1 & x = 2 \end{cases}$$

$$\lim_{x \rightarrow 2} g(x)$$