Existing functions

LaTeX comes with a lot of built-in mathematical functions, such as $\cos x$, $\ln x$ or $\max x$. A complete list of symbols can be found in the *The Comprehensive LATEX Symbol List* hosted in the *Best Practices* part of this repository (`https://github.com/ZenLulz/LatexCompendium/blob/master/best-practices/the-comprehensive-latex-symbol-list.pdf`).

Custom functions

The command *operatorname*

The following formula uses a custom function called *abc*.

$$\operatorname{abc} x$$

The command *DeclareMathOperator*

This command enables to define math functions or operators in the preamble so they can be reused everywhere.

$$\operatorname{abc} x$$

The command *mathrm*

Many people use the command *mathrm*, nevertheless this leads to space issue, as illustrated below.

$$\mathrm{abc} x$$