# Trigonometry

written by Aman Mandal on Functor Network original link: https://functor.network/user/93/entry/45

latexcode This is a minimal working example. To update preview, you can either use the shortcut Ctrl + Enter or click the update preview submenu under the Preview menu in the toolbar.

#### Math formula

Anything between two \$ characters will be treated as TeX math, for example,  $\Gamma(n) = (n-1)! \quad \forall n \in \mathbb{N}$ . For display math, use \$\$ delimiters.

### Numbering and referencing

For any real number x, we have

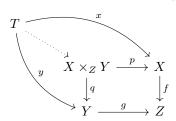
$$\exp(ix) = \sum_{k=0}^{\infty} \frac{(ix)^k}{k!} \tag{1}$$

$$= \cos x + i \sin x. \tag{2}$$

The equation (1) is the power series definition of the exponential function, and the equation (2) is known as Euler's formula.

#### LaTeX package

To use a LaTeX package, include it in the latex preamble submenu under the Meta menu. Here is an example of using tikz-cd package:



A note: there are a few packages that are not supported, so a direct paste of your complex latex preamble may cause errors. But some small changes should be enough to make it work.

### Theorem-like environment

Thm 1 (Fermat's Last Theorem) No three positive integers a, b, and c satisfy the equation  $a^n + b^n = c^n$  for any integer value of n greater than 2.

**Fermat's lost proof** I have a proof of this theorem, but there is not enough space.

You need not remember the exact syntax, the editor will help you with that.

# Bibliography

Einstein's journal paper (Einstein 1905) and Dirac's book (Dirac 1981) are physics-related items.

## Reference

Dirac, Paul Adrien Maurice. 1981. The Principles of Quantum Mechanics. International Series of Monographs on Physics. Clarendon Press.

Einstein, Albert. 1905. "Zur Elektrodynamik bewegter Körper. (German) [On the Electrodynamics of Moving Bodies]." Annalen Der Physik 322 (10): 891–921.