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0.1 newpxtext has been used in this template for regular text.

We denote the set of real numbers as $\mathbb R$ and that of complex numbers as $\mathbb C.$

A map is written as $f: X \to Y$ where $\operatorname{im} f = f(X)$ and $\operatorname{codom} f = Y$. These are large brackets:

$$\left(\frac{a}{b}\right)(a+b)$$

A simple set:

$$\left\{\frac{1}{2}, \frac{2}{3}, \frac{\pi^2}{6}\right\}$$

A set with a predicate:

$$\{z:\zeta(z)=0\}$$

Here is a matrix:

$$\begin{bmatrix} 1 & 1 \\ 0 & 1 \end{bmatrix}$$

Equivalence class of a sequence:

$$\left\lceil \frac{1}{n} \right\rceil$$

This is an aligned equation:

$$A = 1$$

$$B = 2$$

$$C = 3$$

This is a limit:

$$\lim_{n \to \infty} \sum_{i=1}^{n} \frac{1}{i^2}$$

Limits of functions $f: \mathbb{R}^m \to \mathbb{R}^n$ are defined as follows:

$$\lim_{x \to a} f(x) = p \iff \forall \varepsilon > 0, \exists \delta > 0, |x - a| < \delta \implies |f(x) - f(a)| < \varepsilon$$

Here are some derivatives:

$$\frac{dn}{dx} \left(\sum_{k=1}^{\infty} \frac{1}{k^x} \right)$$

Proof. Q.E.D square looks like this...