

The LaTeX Template for Beginners

Kinoko

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Abstract

Hello world! This is my first \LaTeX document.

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Keywords: Learning; September

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1 Mathematical Notations

1.1 superscripts

$$2x^3$$

$$3x^{88}$$

$$x^{4y^9+10}$$

1.2 Subscripts

$$x_1$$

$$y_{12}$$

$$a_0, a_1, a_2, \dots, a_{100}$$

1.3 Greek letters

$$\pi$$

$$\Pi$$

$$\alpha$$

$$A = \pi r^2$$

1.4 Trig functions

$$y = \sin x$$

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$$

$$x = \csc \theta$$

$$y = \sin^{-1} x$$

$$y = \arcsin x$$

1.5 Log functions

$$y = \log x$$

$$y = \log_5 x$$

$$y = \ln x$$

A rectangle has side lengths of $(x + 1)$ and $(x + 3)$. A hard return is going to start a new paragraph.

A rectangle has side lengths of $(x + 1)$ and $(x + 3)$. `\\` is a soft return and therefore the line is not indented.

The equation

$$A(x) = x^2 + 4x + 3$$

gives the area of the rectangle.

`{}` makes sure to keep your equation on a line. (Trevisanato & Kim, 2000)

$$\alpha^2 + \beta^2 = \gamma^2 \tag{1}$$

Famous Gaussian quadrature:

$$\begin{aligned} S &= 1 + 2 + 3 + \cdots + n \\ S &= n + (n - 1) + (n - 2) + \cdots + 1 \\ 2S &= (1 + n) + (2 + (n - 1)) + (3 + (n - 2)) + \cdots + (n + 1) \\ 2S &= n(n + 1) \\ S &= \frac{n(n + 1)}{2} \end{aligned} \tag{2}$$

Formulas for various situations:

$$F(x) = \begin{cases} 0 & , \text{ if } x < -1 \\ x + 1 & , \text{ if } x > 3 \\ 1 & , \text{ otherwise.} \end{cases} \tag{3}$$

$$a^2 + b^2 = c^2$$

2 Insertion of pictures

Try to insert vector graphics(McKay & Blumberg, 2002) so that the image will not change in clarity when it is enlarged or reduced.

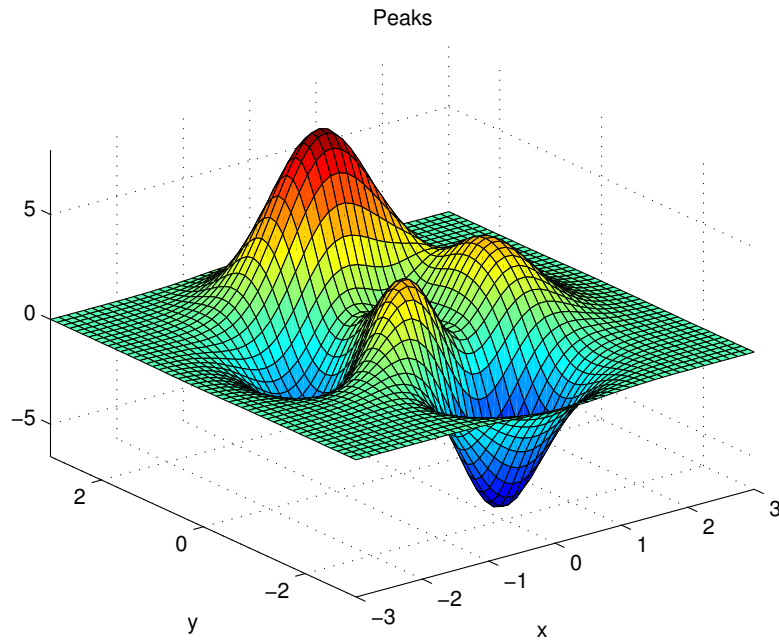


Figure 1: idk what

Reference test Equation 1

3 Sheet

Table 1: My first table

Variable Name	Meanings
N	Nodes, eg. N_g denotes the set of Goal Nodes
A	Adjacency matrix
G	Relationship Network Model(Yang & Wang, 1993)
x	The degree of realization of SDGs, as a 1*17 matrix
Δx	Perturbations arising, for 1*17 matrix
c	Anti-interference coefficient, related

References

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