

The L^AT_EX Template for Beginners

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Abstract

Hello world! This is my first L^AT_EX document.

Let's examine the function $y = \frac{x}{3x^2 + x + 1}$.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

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

$$y = \log x$$
$$y = \log_5 x$$
$$y = \ln x$$

1.6 Roots

$$\sqrt{2}$$
$$\sqrt[3]{x}$$
$$\sqrt{x^2 + y^2} = 10$$
$$\sqrt{1 + \sqrt{x}}$$

1.7 Fractions

$$\frac{1}{2}$$

About $\frac{2}{3}$ of the glass is full.

About $\frac{2}{3}$ of the glass is full.

About $\frac{2}{3}$ of the glass is full.

$$\frac{\sqrt{x+1}}{\sqrt{x+2}}$$

$$y = \frac{1}{1 + \frac{1}{x}}$$

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:

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

Formulas for various situations:

$$F(x) = \begin{cases} 0 & , \text{if } x < -1 \\ x + 1 & , \text{if } x > 3 \\ 1 & , \text{otherwise.} \end{cases} \tag{2}$$

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

This is the symbol for the set of all real numbers: \mathbb{R} .

2 Brackets

The distributive property states that $a(b + c) = ab + ac$, for all $a, b, c \in \mathbb{R}$

The equivalence class of a is $[a]$

The set A is defined to be $\{1, 2, 3\}$.

The movie ticker costs \$11.50.

$$2\left(\frac{1}{x^2 - 1}\right)$$

$$2\left(\frac{1}{x^2 - 1}\right)$$

$$2\left[\frac{1}{x^2 - 1}\right]$$

$$2\left\{\frac{1}{x^2 - 1}\right\}$$

$$2\left\langle\frac{1}{x^2 - 1}\right\rangle$$

$$2\left|\frac{1}{x^2 - 1}\right|$$

$$\left.\frac{dy}{dx}\right|_{x=1}$$

$$\left(\frac{1}{1 + \left(\frac{1}{x-1}\right)}\right)$$

3 Lists

1. pencil
2. calculator
3. ruler
4. notebook
 - (a) notes
 - (b) homework
 - (c) assessments
 - i. tests
 - ii. quizzes
 - iii. journal entries

5. highlighters

- i. pencil
- ii. calculator
- iii. ruler
- iv. notebooks

- pencil
- calculator
- ruler
- notebook
 - notes
 - homework
 - assessments
 - * tests
 - * quizzes
 - * journal entries
- highlighters

apple

one banana

two pear

4 Text formate

This will produce *italicized* text.

This will produce **bold face** text.

This will produce SMALL CAPS text.

This will produce typewriter font text.

Please visit Michelle Kr's website at <http://Michelle.com>.

Please visit XIAMEN University Malaysia's website at XMUM Official website.

Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.

Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.
Please excuse my dear aunt Sally.

This line is centered.

This line is left-justified.

This line is right-justified.

5 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.

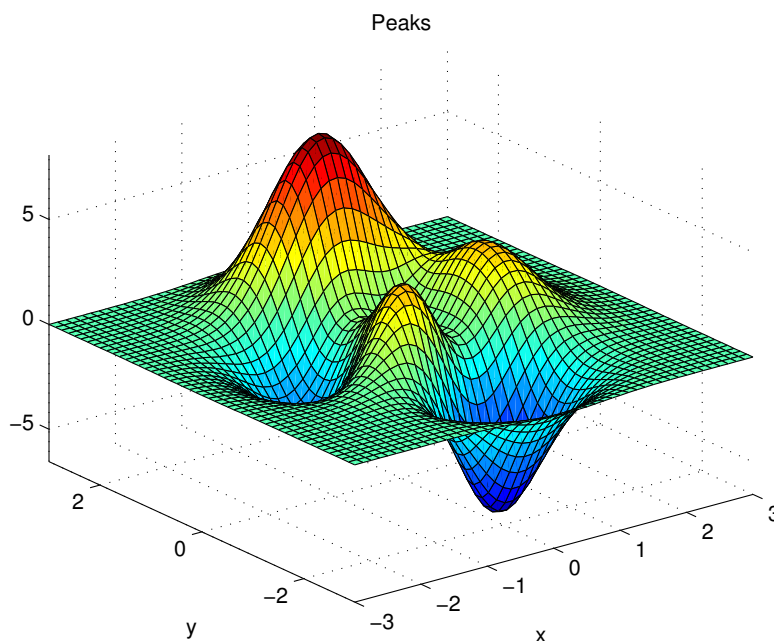


Figure 1: idk what

Reference test Equation 1

6 Sheet

x	1	2	3	4	5
$f(x)$	d	d	w3	f8iw	viu

Table 1: Sweet baby

Table 2: My first table

Variable Name	Meanings
N	Nodes, eg. Ng 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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