

L^AT_EX Tutorial

Your Name Here

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Abstract

The purpose of this exercise is to familiarize yourself with L^AT_EX. Some basic commands and environments will be used. Try to duplicate this document. You will notice that you must typeset the document twice for the table of contents to update. You should also notice that hitting enter twice will start a new paragraph, but beyond that spaces don't matter.

1 Itemized and Enumerated Lists

First figure out how to type an itemized list of greek letters.

- α
- β

- γ

Now number the list.

1. α
2. β
3. γ

2 Basic Mathematical Typesetting

A quadratic equation is an equation of the form $ax^2 + bx + c$. The quadratic formula is given by

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.$$

3 Aligned Equations

When solving an equation it is useful to be able to type several lines at once and align them.

$$\begin{aligned} 5(x - 2) + 9 &= 39 \\ 5x - 10 + 9 &= 39 \text{ (Distributive Property)} \\ 5x - 1 &= 39 \\ 5x &= 40 \\ x &= 8 \end{aligned}$$

4 Arrays

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

5 Tables

Function	Operation
x	$\sum_{k=0}^{\infty}$
x^2	\int_0^1
$\log x$	$\frac{d}{dx}$