lecture 1

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July 3, 2025

1 Introduction

Hello world use this format to add a new line just below
Okay so i realised how this work using twice just adds a new line
and when you write below it the margin is maintained
but if you give a space then also newline is added but a new text is considered

like this now this text is center aligned separately and if you don't give both
neither space nor then concatenation of the two sentence in different line.
so whenever you want to start a new line but maintain the
margin use two times
otherwise to start a new paragraph just give a space like this also no matter
how many space you give it will be counted as one new line

Now we will write an inline formula $e^{i\pi} + 1 = 0$
for a single line equation.

$$\lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n = e = \lim_{n \to \infty} \frac{n}{\sqrt[n]{n!}}$$

For another summation formula

$$e = \sum_{n=0}^{\infty} \frac{1}{n!}$$

1. $(a+b)^2 = a^2 + 2ab + b^2$

2. $(a-b)^2 = a^2 - 2ab + b^2$

3. $(a^2 - b^2) = (a-b)(a+b)$

- $(a+b)^2 = a^2 + 2ab + b^2$

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- $(a^2 - b^2) = (a-b)(a+b)$

You can use star with section, article and subsection to remove numbring

more Formula

$$\int_a^b f(x)dx$$

$$\vec{v} = < v_1, v_2, v_3 >$$

next one uses amsmath

$$\iiint_a^b f(x, y, z)dxdydz$$

$$\vec{v} \cdot \vec{w}$$

matrix also need amsmath

$$\begin{bmatrix} 3 & 5 & 6 \\ 4 & n & s \end{bmatrix}$$

to add images use the following command