

1 Text

Write as usual. You can make **bold** or *italic*.

You can write larger larger and larger and then back normal. Latex ignores whitespace: several spaces is the same as single. You can make space using `\hspace{1cm}`.

A line of whitespaces gives paragraph. Break line using `\par` without new paragraph.

2 Math

Inline math is using *dollars*: $y = \sin x$. Display math (outside text) is using

$$y = \sum_i \sin x_i$$

without numbering or

$$\int_a^b \frac{df}{dx} dx = f(b) - f(a) \tag{1}$$

with numbers.

Subscripts make like this x_i , superscripts like this a^n . More complicated should be enclosed in `{ }`: $X_{ias}, Y^{\alpha\beta\gamma}$.

Elementary functions: `\sin`, `\cos`, `\exp`, `\tan`, `\cot`, `\sinh`, `\cosh`, `\ln`. Warning: you should put space between a keyword like `\sin` and argument: $\sin x$.

Fraction:

$$\frac{x}{y}$$

Square root:

$$\sqrt{xy}$$

Other symbols:

sum

$$\sum_{n=1}^{\infty} x_n$$

integral

$$\int_a^b \frac{dx}{x} = \ln \left| \frac{b}{a} \right| = \ln \left| \frac{b}{a} \right|$$

Vector make using math bold: **E** (preferred) or \vec{E} . Better way is to use `\usepackage{bm}` before `\begin{document}` and then `\bm{E}`.

This is enough to start.