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1 Section

Hello World!

1.1 Math Functions in Latex

There are two major modes of typesetting math in LaTeX one is embedding the math directly into your text by encapsulating your formula in dollar $ signs and the other is using a predefined math environment.

$$f(x) = x^2$$

1.1.1 Subsubsection

This formula $f(x) = x^2$ is an example.

$$1 + 2 = 3$$
$$1 = 3 - 2$$

$$1 + 2 = 3$$
$$1 = 3 - 2$$

Fractions and More LaTeX is capable of displaying any mathematical notation. It's possible to typeset integrals, fractions and more. Every command has a specific syntax to use.

$$f(x) = x^2$$
$$g(x) = \frac{1}{x}$$
$$F(x) = \int_b^a \frac{1}{3}x^3$$

It is also possible to combine various commands to create more sophisticated expressions such as:

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

1.2 Matrices

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

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

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

2 Figures and Images in LaTeX

- Captioned images / figures in LaTeX
- Image positioning / setting the float
- Multiple images / subfigures in LaTeX

2.1 Captioned images / figures in LaTeX

Figure 1: A boat.

Figure 1: A boat.

2.2 Multiple Images

(a) Coffee. (b) More coffee.

Figure 1: The same cup of coffee. Two times.

(a) Coffee. (b) More coffee.

Figure 1: The same cup of coffee. Two times.

(a) Coffee. (b) More coffee.

Figure 2: The same cup of coffee. Two times.