Hello! This is my LaTeX document.

A rectangle has side length of $(x + 1)$ and area of $(x + 3)$. The equation $A(x) = x^2 + 2x + 1$ is the area of the rectangle.

superscripts

$$2x^3$$

$$2x^{34}$$

$$2x^{3x+4}$$

$$2x^{3x^4+5}$$

subscripts

$$x_1$$

$$x_{12}$$

$$x_{1_2}$$

$$a_o, a_1, a_2, \ldots, a_{100}$$

greek letters

$$\pi$$

$$\Pi$$

$$\alpha$$

$$A = \pi r^2$$

trig functions

$$y = \sin x$$

$$y = \cos x$$

$$y = \tan x$$

$$y = \csc \theta$$

$$y = \sin^{-1} x$$

$$y = \arcsin x$$

log functions

$$y = \log x$$

$$y = \log_5 x$$

$$y = \ln x$$

roots

$$\sqrt{2}$$

$$\sqrt[3]{2}$$

$$\sqrt{x^2+y^2}$$

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

fractions

$$\frac{2}{3}$$

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

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

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

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