Hello this is my first document

a new rectangle has sides $(x+1)$ and $(x+3)$. The equation

$$A(x) = x^2 + 4x + 3$$

gives the area of he rectangle.

superscripts

$$2x^2$$

$$2x^{34}$$

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

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

subscripts

$$x_1$$

$$x_{12}$$

$$a_1, a_2, a_3, \ldots, a_{100}$$

greek

$$\pi$$

$$\Pi$$

$$\alpha$$

$$A = \pi^2$$

trig

$$y = \sin x$$

$$y = \cos x$$

$$y = \csc \theta$$

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

log

$$y = \log x$$

$$y = \log_5 x$$

$$y = \ln x$$

root

$$\sqrt{2}$$

$$\sqrt[3]{9}$$

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