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.

 ${\it superscripts}$

$$2x^2$$
$$2x^{34}$$

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

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

 ${\bf subscripts}$

$$x_1$$

$$x_{12}$$

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

greek

 π

П

 α

$$A = \pi^2$$

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

$$\sqrt{2}$$

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

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

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

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

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

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

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