$$2x^{3}4 2x^{34} 2x^{3x^{4}+5}$$

subscripts:

$$x_1$$
 x_12
 x_{12}
 x_{1_2}
 $x_{1_{2_3}}$
 $a_0, a_1, a_2, \dots, a_{100}$

 ${\it Greek\ Letters}:$

$$\pi$$

$$\Pi$$

$$\alpha$$

$$A = \pi r^2$$

functions:

$$y = \sin(x)$$

$$y_2 = \tanh(x^2)$$

$$y_3 = \csc(\theta)$$

$$y = \sin^{-1}(\theta)$$

$$\arcsin(x)$$

$$\log x$$

$$\log_2 x$$

$$\ln x^2$$

 ${\bf Roots}:$

$$\sqrt{x}$$
 $\sqrt[3]{\Gamma}$

Fractions:

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

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

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

$$\frac{\sqrt{x+1}}{\sqrt[5]{\frac{c^2}{v_1}}}$$