Superscripts: $2x^3$

 $2x^3$

 $2x^34$

 $2x^{34}$

 $2x^{3x+4}$

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

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

 ${\bf Subscripts:}$

 $2x_1$

 x_{12}

 x_12

 x_{1_2}

 x_{123}

Greek Letters:

 π

 α

 γ

 δ

1

 ψ

Area of a circle is

 $A=\pi r^2$

Trigonometric equations:

 $y = \sin x$

 $y = \cos x$

 $y = \tan x$

Logarithmic equations:

log x

lnx

 log_5x

Square root

 $\sqrt{2}$

 $\sqrt[3]{2}$

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

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

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

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

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

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

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