Superscription:

$$2x^3$$

$$2x^{34}$$

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

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

Subscript:

$$x_1$$

$$x_13$$

$$x_{13}$$

$$x_{1_3}$$

$$x_{1_{3_1}}$$

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

Greek letters:

$$\pi$$

$$\Pi$$

$$\alpha$$

$$A = \pi^2$$

$$A = \pi r^2$$

Trig Function:

$$y = sinx$$

$$y = \sin x$$

$$y = \cos x$$

$$y = \tan x$$

$$y = \csc \theta$$

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

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

$$y = \arcsin^{-1} 1$$

$$y = logx$$

$$y = \log x$$

$$y = \log_5 x$$

$$y = \ln x$$

Roots:

$$\sqrt{2}$$

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

$$\sqrt{x^2 + y^3}$$

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

Fractions:

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

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

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

$$\frac{1}{\frac{1}{2}}$$

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