

superscripts:

$$\begin{aligned}2x^3 \\2x^{34} \\2x^{3x+4} \\2x^{3x^4+5}\end{aligned}$$

subscripts:

$$\begin{aligned}x_1 \\x_{12} \\x_{123}\end{aligned}$$

greek letters:

$$\begin{aligned}\pi \\\alpha \\A = \pi r^2\end{aligned}$$

trig functions:

$$y = \sin x$$

log functions:

$$\begin{aligned}\log_5 x \\\ln x\end{aligned}$$

square roots:

$$\begin{aligned}\sqrt{2} \\\sqrt[3]{2} \\\sqrt{x^2 + y^2} \\\sqrt{1 + \sqrt{x}}\end{aligned}$$

fractions:

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

$$\begin{aligned}\frac{x}{x^2 + x + 1} \\\frac{\sqrt{x+1}}{\sqrt{x-1}}\end{aligned}$$

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