superscripts:

$$2x^3$$

$$2x^{343}$$

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

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

$$(2x+1)^2$$

$$A = \pi r^2$$

subscripts:

$$x_1$$

$$x_{12}$$

$$x_{2n_2}$$

$$x_{1\,2}$$

$$\alpha\beta\gamma\delta\epsilon\zeta\eta\theta\iota\kappa\lambda\mu\nu\xi\pi\rho\sigma\tau\upsilon\phi\chi\psi\omega$$

$$\Gamma\Delta\Omega\Lambda\Sigma$$

Trig functions:

$$\sin 2x$$

Log functions:

$$\log_2 x$$

$$\ln x$$

Roots:

$$\sqrt{400}$$

$$\sqrt[3]{27}$$

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

Fractions:

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

$$\frac{x}{\sqrt[3]{x^2+x+1}}$$

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

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

$$\sqrt[4]{\frac{x}{x+1}}$$

$$\{[(x+1)+y]+z^2\}$$

$$\$10.99$$

$$3\left(\frac{2}{5}\right)$$

$$3\left[\frac{2}{5}\right]$$

$$3\left\{\frac{2}{5}\right\}$$

$$\left|\frac{x}{x+1}\right|$$

$$\left.\frac{dy}{dx}\right|_{x=1}$$

x	1	2	3	4	5
$f(x)$	10	11	12	13	14

$$\begin{aligned} 5x^2 - 9 &= x + 3 \\ 4x^2 &= 12 \\ x^3 &= 3 \\ x &\approx \pm 1.732 \end{aligned}$$