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

Subscripts:
$$x_1$$
$$x_{12}$$
$$x_{12}$$
$$x_{123}$$

Greek Letters:
$$\pi$$
$$\alpha$$
$$A = \pi r^2$$

Trig Functions:
$$y = \sin(x)$$

Log Functions:
$$y = \log(x)$$
$$y = \log_5(x)$$

Square Roots:
$$\sqrt{2}$$
$$\sqrt[3]{2}$$
$$\sqrt[3]{x}$$
$$\sqrt[3]{x^2 + y^2}$$
$$\sqrt[3]{1 + \sqrt{x}}$$

Fractions: About 2/3 of the glass is full.
About $\frac{1}{3}$ of the glass is full.
$$\frac{x}{x^2 + x + 1}$$

$$\frac{x}{\sqrt[4]{x^2 + x + 1}}$$

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

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

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