superscripts:

$$2x^{3}
2x^{34}
2x^{3x+4}
2x^{3^{4}+5}$$

subscripts:

$$x_1$$
 x_{12}
 x_{12}
 x_{12}

greek letters:

$$\pi$$

$$\alpha$$

$$A = \pi r^2$$

$$y = \sin(x)$$

$$\log_5(x)$$

$$\ln(x)$$

square roots:

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

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

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

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

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

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

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

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