$$\sqrt{\frac{2^{n}}{2_{n}}} \neq \sqrt[\frac{1}{N}]{1+n}$$

$$\frac{2^{k}}{2^{k+2}}$$

$$x^{2}$$

$$\frac{2^{(k+2)}}{2^{(k+2)}}$$

$$\log_{2} 2^{8} = 8$$

$$\sqrt[3]{e^{x} - \log_{2} x}$$

$$\lim_{n \to \infty} \sum_{k=1}^{n} \frac{1}{k^{2}} = \frac{\pi^{2}}{6}$$

$$\int_{2}^{\infty} \frac{1}{\log_{2} x} dx = \frac{1}{x} \sin x = 1 - \cos^{2}(x)$$

$$\mathbf{X} = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1K} \\ a_{21} & a_{22} & \dots & a_{2K} \\ \vdots & \vdots & \ddots & \vdots \\ a_{K1} & a_{K2} & \dots & a_{KK} \end{bmatrix} * \begin{bmatrix} x_{1} \\ x_{2} \\ \vdots \\ x_{K} \end{bmatrix} = \begin{bmatrix} b_{1} \\ b_{2} \\ \vdots \\ b_{K} \end{bmatrix}$$