$$\lim_{k\to\infty}\sum_{n=1}^{k}\frac{1}{n^4}=\frac{\pi^4}{90}$$

$$\int_{-\infty}^{\infty} e^{-\alpha x^2}\,\mathrm{d}x=\sqrt{\frac{\pi}{\alpha}}$$

$$e^z=\lim_{n\to\infty}\left(1+\frac{z}{n}\right)^n$$

$$\frac{\mathrm{d}}{\mathrm{d}x}\int_a^x f(t)\,\mathrm{d}t=f(x)$$

$$\frac{\mathrm{d}f}{\mathrm{d}x}=\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$$

$$\int_{-\infty}^{\infty}\frac{\sin(\pi x)}{\pi x}\,\mathrm{d}x=\pi$$

$$\hat{f}(\omega)=\int_{-\infty}^{\infty} e^{-2\pi i\omega t} f(t)\,\mathrm{d}t$$

$$\frac{\partial^2 u}{\partial t^2}=c^2\frac{\partial^2 u}{\partial x^2}$$

$$\nabla\times\boldsymbol{B}=\mu_0\boldsymbol{j}+\epsilon_0\mu_0\frac{\partial\boldsymbol{E}}{\partial t}$$

$$i\hbar\frac{\partial}{\partial t}\left|\Psi(t)\right\rangle=\hat{H}\left|\Psi(t)\right\rangle$$