

Lista de Series:

$$e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!} \quad \text{para todo } x$$

$$\sin x = \sum_{n=0}^{\infty} \frac{(-1)^n}{(2n+1)!} x^{2n+1} \quad \text{para todo } x$$

$$\cos x = \sum_{n=0}^{\infty} \frac{(-1)^n}{(2n)!} x^{2n} \quad \text{para todo } x$$

$$\tan x = \sum_{n=1}^{\infty} \frac{B_{2n}(-4)^n(1-4^n)}{(2n)!} x^{2n-1} \quad \text{para } |x| < \frac{\pi}{2}$$

$$\arcsin x = \sum_{n=0}^{\infty} \frac{(2n)!}{4^n(n!)^2(2n+1)} x^{2n+1} \quad \text{para } |x| < 1$$

$$\arctan x = \sum_{n=0}^{\infty} \frac{(-1)^n}{2n+1} x^{2n+1} \quad \text{para } |x| < 1$$

$$\sinh x = \sum_{n=0}^{\infty} \frac{1}{(2n+1)!} x^{2n+1} \quad \text{para todo } x$$

$$\cosh x = \sum_{n=0}^{\infty} \frac{1}{(2n)!} x^{2n} \quad \text{para todo } x$$

$$\tanh x = \sum_{n=1}^{\infty} \frac{B_{2n}4^n(4^n-1)}{(2n)!} x^{2n-1} \quad \text{para } |x| < \frac{\pi}{2}$$

Números de Bernoulli

$$B_0 = 1$$
$$B_m = - \sum_{j=0}^{m-1} \binom{m}{j} \frac{B_j}{m+1-j}$$