| |
|---|
| $e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \ldots$ |
| $\boldsymbol{coth}^{-1} x = \frac{1}{x} + \frac{1}{(3x^3)} + \frac{1}{(5x^5)} + \frac{1}{(7x^7)} + ..$ |
| $a^x = 1 + \frac{(x \boldsymbol{ln} a)}{1!} + \frac{(x \boldsymbol{ln} a)^2}{2!} + \frac{(x \boldsymbol{ln} a)^3}{3!} + ..$ |
| $\boldsymbol{ln}(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} - \ldots$ |
| $\boldsymbol{tanh}\, x = x - \frac{1}{3}x^3 + \frac{2}{15}x^5 - \frac{17}{315}x^7 + \ldots$ |
| $\boldsymbol{coth}\, x = \frac{1}{x} + \frac{1}{3}x - \frac{1}{45}x^3 + \frac{2}{945}x^5$ |
| $\boldsymbol{cosh}^{-1} x = \boldsymbol{ln}\, 2\mathrm{x} - \frac{1}{2} \cdot \frac{1}{(2x^2)} - \frac{[(1)(3)]}{[(2)(4)]} \cdot \frac{1}{(4x^4)} - \frac{[(1)(3)(5)]}{[(2)(4)(6)]} \cdot \frac{1}{(6x^6)} + ..$ |