Tavola dei principali sviluppi di Taylor

$e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!} = 1 + x + \frac{x^2}{2} + \frac{x^3}{6} + \frac{x^4}{24} + O(x^5)$	
$\sin(x) = \sum_{n=0}^{\infty} \frac{(-1)^n \cdot x^{(2n+1)}}{(2n+1)!} = x - \frac{x^3}{6} + \frac{x^5}{120} + O(x^7)$	
$\cos(x) = \sum_{n=0}^{\infty} \frac{(-1)^n \cdot x^{2n}}{(2n)!} = 1 - \frac{x^2}{2} + \frac{x^4}{24} - \frac{x^6}{720} + O(x^7)$	
$\tan(x) = x + \frac{x^3}{3} + \frac{2x^5}{15} + \frac{17x^7}{315} + O(x^8)$	$\lvert x\rvert < \frac{\pi}{2}$
$\sin^2(x) = x^2 + \frac{x^4}{3} + \frac{2x^6}{45} + O(x^7)$	
$\cos^2(x) = 1 - \frac{x^2}{2} + \frac{x^4}{3} - \frac{2x^6}{45} + O(x^7)$	
$\ln(1+x) = \sum_{n=0}^{\infty} \frac{(-1)^n \cdot x^{n+1}}{(n+1)} = x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} + O(x^6)$	
$(1+x)^\alpha = \sum_{n=0}^{\infty} \binom{\alpha}{n} \cdot x^n$	$\binom{\alpha}{n} = \frac{\alpha \cdot (\alpha-1) \cdot (\alpha-2) \ldots [\alpha-(n-1)]}{n!}$

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