

Formules de développement limité

- $(1+x)^\alpha = 1 + \alpha x + \frac{\alpha(\alpha-1)}{2!}x^2 + \frac{\alpha(\alpha-1)(\alpha-2)}{3!}x^3 + x^3\varepsilon(x)$
- $e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + x^3\varepsilon(x)$
- $\frac{1}{1-x} = 1 + x + x^2 + x^3 + x^3\varepsilon(x)$
- $\ln(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} + x^3\varepsilon(x)$
- $\sin(x) = x - \frac{x^3}{3!} + x^3\varepsilon(x)$
- $\cos(x) = 1 - \frac{x^2}{2!} + x^3\varepsilon(x)$
- $sh(x) = x + \frac{x^3}{3!} + x^3\varepsilon(x)$
- $ch(x) = 1 + \frac{x^2}{2!} + x^3\varepsilon(x)$
- $\arctan(x) = x - \frac{x^3}{3} + o(x^3)$
- $\tan(x) = x + \frac{x^3}{3} + o(x^3)$