Formules de dévellopement limité

$$ullet \ (1+x)^lpha = 1 + lpha x + rac{lpha(lpha-1)}{2!} x^2 + rac{lpha(lpha-1)(lpha-2)}{3!} x^3 + x^3 arepsilon(x)$$

$$ullet e^x = 1 + x + rac{x^2}{2!} + rac{x^3}{3!} + x^3 arepsilon(x)$$

•
$$\frac{1}{1-x} = 1 + x + x^2 + x^3 + x^3 \varepsilon(x)$$

•
$$\ln(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} + x^3 \varepsilon(x)$$

•
$$\sin(x) = x - \frac{x^3}{3!} + x^3 \varepsilon(x)$$

$$ullet \cos(x) = 1 - rac{x^2}{2!} + x^3 arepsilon(x)$$

•
$$sh(x) = x + \frac{x^3}{3!} + x^3 \varepsilon(x)$$

$$ullet ch(x)=1+rac{x^2}{2!}+x^3arepsilon(x)$$

•
$$\arctan(x) = x - \frac{x^3}{3} + o(x^3)$$

•
$$\tan(x) = x + \frac{x^3}{3} + o(x^3)$$