$$f(x) = f(a) + \frac{f'(a)}{1!}(x-a) + \frac{f^{(2)}(a)}{2!}(x-a)^2 + \cdots + \frac{f^{(n)}(a)}{n!}(x-a)^n + R_n(x)$$

f(x) = e^x a=0

f(0) = 1

f'(x) = e^x f'(0) = 1

f''(x) = e^x f''(0) = 1

Au voisinage de 0 on a :

f(x) = 1 + 1 (x-0) + 1 $(x-0)^2/2$ + … = 1 + x + $x^2/2$ + …