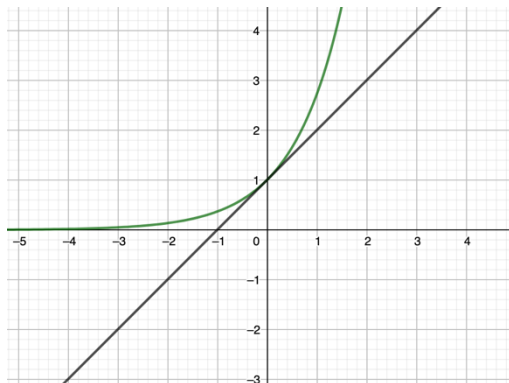


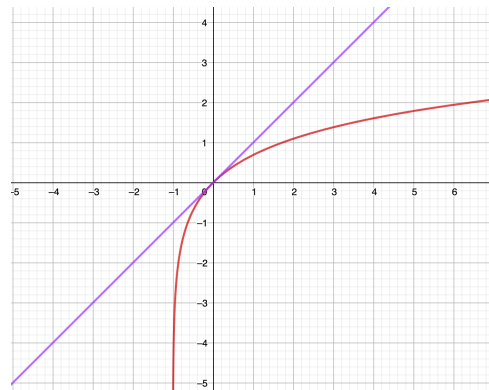
En particulier, si on a par exemple avec $\alpha > 0$:

$$f(x) = a_0 + a_1x + \alpha x^2 + o(x^2)$$



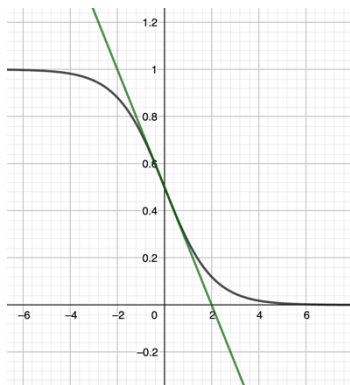
$$e^x = 1 + x + \frac{x^2}{2} + o(x^2)$$

$$f(x) = a_0 + a_1x - \alpha x^2 + o(x^2)$$



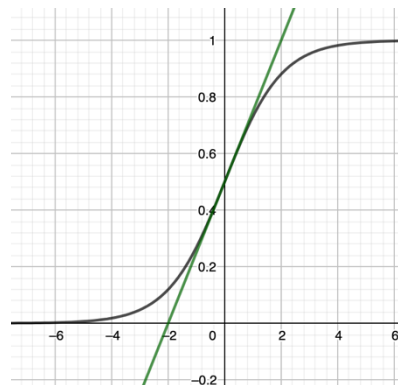
$$\ln(1+x) = x - \frac{x^2}{2} + o(x^2)$$

$$f(x) = a_0 + a_1x + \alpha x^3 + o(x^3)$$



$$\frac{1}{1+e^x} = \frac{1}{2} - \frac{x}{4} + \frac{x^3}{48} + o(x^3)$$

$$f(x) = a_0 + a_1x - \alpha x^3 + o(x^3)$$



$$\frac{1}{1+e^{-x}} = \frac{1}{2} + \frac{x}{4} - \frac{x^3}{48} + o(x^3)$$