DSE(0) usuels

$$e^x = \sum_{n=0}^{+\infty} \frac{x^n}{n!}$$

$$\cosh(x) = \sum_{n=0}^{+\infty} \frac{x^{2n}}{(2n)!}$$

$$\sinh(x) = \sum_{n=0}^{+\infty} \frac{x^{2n+1}}{(2n+1)!}$$

$$\cos(x) = \sum_{n=0}^{+\infty} \frac{(-1)^n x^{2n}}{(2n)!}$$

$$\sin(x) = \sum_{n=0}^{+\infty} \frac{(-1)^n x^{2n+1}}{(2n+1)!}$$

$$(1+x)^\alpha = 1 + \sum_{n=1}^{+\infty} \frac{\alpha(\alpha-1)\dots(\alpha-n+1)}{n!} x^n$$

$$\frac{1}{1+x} = \sum_{n=0}^{+\infty} (-1)^n x^n$$

$$\frac{1}{1-x} = \sum_{n=0}^{+\infty} x^n$$

$$\ln(1+x) = \sum_{n=1}^{+\infty} \frac{(-1)^{n+1}}{n} x^n$$

$$-\ln(1-x) = \sum_{n=1}^{+\infty} \frac{x^n}{n}$$

$$\arctan(x) = \sum_{n=0}^{+\infty} \frac{(-1)^n}{2n+1} x^{2n+1}$$

$$\operatorname{argth}(x) = \sum_{n=0}^{+\infty} \frac{x^{2n+1}}{2n+1}$$

$$\arcsin(x) = x + \sum_{n=1}^{+\infty} \frac{(2n)!}{(2^n n!)^2} \frac{x^{2n+1}}{2n+1}$$

$$\operatorname{argsh}(x) = \sum_{n=0}^{+\infty} \frac{(-1)^n (2n)!}{(2^n n!)^2} \frac{x^{2n+1}}{2n+1}$$