Dans ce tableau, $n \in \mathbb{N}^*$, $a \in \mathbb{R}$. Tous ces DL sont valables **en zéro seulement**.

e^{x}	$=$	$\displaystyle\sum_{k=0}^{n} \frac{x^k}{k!} + o(x^n)$	$=$	$1 + x + \dfrac{x^2}{2} + \dfrac{x^3}{6} + \dfrac{x^4}{24} + \dfrac{x^5}{120} + o(x^5)$
$\sin x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{(-1)^k x^{2k+1}}{(2k+1)!} + o(x^{2n+1})$	$=$	$x - \dfrac{x^3}{6} + \dfrac{x^5}{120} + o(x^6)$
$\cos x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{(-1)^k x^{2k}}{(2k)!} + o(x^{2n})$	$=$	$1 - \dfrac{x^2}{2} + \dfrac{x^4}{24} + o(x^5)$
$\tan x$		$=$		$x + \dfrac{x^3}{3} + \dfrac{2x^5}{15} + \dfrac{17x^7}{315} + o(x^8)$
$\operatorname{Arcsin} x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{(2k)!}{2^{2k}(k!)^2} \times \frac{x^{2k+1}}{2k+1} + o(x^{2n+1})$	$=$	$x + \dfrac{x^3}{6} + \dfrac{3x^5}{40} + o(x^5)$
$\operatorname{Arctan} x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{(-1)^k x^{2k+1}}{2k+1} + o(x^{2n+1})$	$=$	$x - \dfrac{x^3}{3} + \dfrac{x^5}{5} + o(x^5)$
$\operatorname{sh} x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{x^{2k+1}}{(2k+1)!} + o(x^{2n+1})$	$=$	$x + \dfrac{x^3}{6} + \dfrac{x^5}{120} + o(x^5)$
$\operatorname{ch} x$	$=$	$\displaystyle\sum_{k=0}^{n} \frac{x^{2k}}{(2k)!} + o(x^{2n})$	$=$	$1 + \dfrac{x^2}{2} + \dfrac{x^4}{24} + o(x^5)$
$\operatorname{th} x$		$=$		$x - \dfrac{x^3}{3} + \dfrac{2x^5}{15} - \dfrac{17x^7}{315} + o(x^8)$
$\ln(1+x)$	$=$	$\displaystyle\sum_{k=1}^{n} \frac{(-1)^{k-1} x^k}{k} + o(x^n)$	$=$	$x - \dfrac{x^2}{2} + \dfrac{x^3}{3} - \dfrac{x^4}{4} + \dfrac{x^5}{5} + o(x^5)$
$\ln(1-x)$	$=$	$\displaystyle -\sum_{k=1}^{n} \frac{x^k}{k} + o(x^n)$	$=$	$-x - \dfrac{x^2}{2} - \dfrac{x^3}{3} - \dfrac{x^4}{4} - \dfrac{x^5}{5} + o(x^5)$
$(1+x)^a$	$=$	$\displaystyle 1 + \sum_{k=1}^{n} \left(\prod_{i=0}^{k-1} (a-i) \right) \frac{x^k}{k!} + o(x^n)$	$=$	$1 + ax + \frac{a(a-1)}{2} x^2 + \frac{a(a-1)(a-2)}{6} x^3 + o(x^3)$
$\dfrac{1}{1+x}$	$=$	$\displaystyle\sum_{k=0}^{n} (-1)^k x^k + o(x^n)$	$=$	$1 - x + x^2 - x^3 + x^4 - x^5 + o(x^5)$
$\dfrac{1}{1-x}$	$=$	$\displaystyle\sum_{k=0}^{n} x^k + o(x^n)$	$=$	$1 + x + x^2 + x^3 + x^4 + x^5 + o(x^5)$
$\sqrt{1+x}$		$=$		$1 + \dfrac{x}{2} - \dfrac{x^2}{8} + \dfrac{x^3}{16} + o(x^3)$
$\dfrac{1}{\sqrt{1+x}}$		$=$		$1 - \dfrac{x}{2} + \dfrac{3x^2}{8} - \dfrac{5x^3}{16} + o(x^3)$