FORMULÁRIO

$\cos(a-b) = \cos(a)\cos(b) + \sin(a)\sin(b)$	$\cos(a+b) = \cos(a)\cos(b) - \sin(a)\sin(b)$	$\cos^2(x) - \sin^2(x) = \cos(2x)$
$\sin(a-b) = \sin(a)\cos(b) - \cos(a)\sin(b)$	$\sin(a+b) = \sin(a)\cos(b) + \cos(a)\sin(b)$	$\cos^2(x) = \dfrac{1+\cos(2x)}{2}$
$\cos(p) + \cos(q) = 2\cos\left(\dfrac{p+q}{2}\right)\cos\left(\dfrac{p-q}{2}\right)$	$\cos(p) - \cos(q) = -2\sin\left(\dfrac{p+q}{2}\right)\sin\left(\dfrac{p-q}{2}\right)$	$\tan^2(x) = \dfrac{1-\cos(2x)}{1+\cos(2x)}$
$\sin(p) + \sin(q) = 2\sin\left(\dfrac{p+q}{2}\right)\cos\left(\dfrac{p-q}{2}\right)$	$\sin(p) - \sin(q) = 2\cos\left(\dfrac{p+q}{2}\right)\sin\left(\dfrac{p-q}{2}\right)$	$\sin^2(x) + \cos^2(x) = 1$

$$\int_a^b f(x)dx = Pf(b) - Pf(a),$$

$$f(x) = \sum_{n=0}^{N} \frac{f^{(n)}(x_0)}{n!}(x-x_0)^n + \frac{f^{(N+1)}(x_0+\theta(x-x_0))}{(N+1)!}(x-x_0)^{N+1},\ \theta \in [0,1].$$

$D(f)$	f	$D(f')$	f'
$]0,+\infty[$	x^α	$]0,+\infty[$	$\alpha x^{\alpha-1}$
$\mathbb{R}$	e^x	$\mathbb{R}$	e^x
$\mathbb{R}\setminus\{0\}$	$\ln(\lvert x\rvert)$	$\mathbb{R}\setminus\{0\}$	$\frac{1}{x}$
$\mathbb{R}$	$\sin(x)$	$\mathbb{R}$	$\cos(x)$
$\mathbb{R}$	$\cos(x)$	$\mathbb{R}$	$-\sin(x)$
$\mathbb{R}-\{\frac{\pi}{2}+k\pi,\ k\in\mathbb{Z}\}$	$\tan(x)$	$\mathbb{R}-\{\frac{\pi}{2}+k\pi,\ k\in\mathbb{Z}\}$	$1+\tan^2(x)$
$[-1,1]$	$\arcsin(x)$	$]-1,1[$	$\frac{1}{\sqrt{1-x^2}}$
$[-1,1]$	$\arccos(x)$	$]-1,1[$	$-\frac{1}{\sqrt{1-x^2}}$
$\mathbb{R}$	$\arctan(x)$	$\mathbb{R}$	$\frac{1}{1+x^2}$
$\mathbb{R}$	$\sinh(x)$	$\mathbb{R}$	$\cosh(x)$
$\mathbb{R}$	$\cosh(x)$	$\mathbb{R}$	$\sinh(x)$
$\mathbb{R}$	$\tanh(x)$	$\mathbb{R}$	$1-\tanh^2(x)$
$\mathbb{R}$	$\arg\sinh(x)$	$\mathbb{R}$	$\frac{1}{\sqrt{1+x^2}}$
$[1,+\infty]$	$\arg\cosh(x)$	$]1,+\infty[$	$\frac{1}{\sqrt{x^2-1}}$
$]-1,1[$	$\arg\tanh(x)$	$]-1,1[$	$\frac{1}{1-x^2}$

$\exp(x) = \sum_{n=0}^{\infty} \frac{x^n}{n!} = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \cdots$	$x \in \mathbb{R}$
$\ln(1+x) = \sum_{n=1}^{\infty} (-1)^{n+1} \frac{x^n}{n} = \frac{x}{1} - \frac{x^2}{2} + \frac{x^3}{3} + \cdots$	$x \in]-1, 1]$
$\sin x = \sum_{n=0}^{\infty} (-1)^n \frac{x^{2n+1}}{(2n+1)!} = x - \frac{x^3}{3!} + \frac{x^5}{5!} + \cdots$	$x \in \mathbb{R}$
$\cos x = \sum_{n=0}^{\infty} (-1)^n \frac{x^{2n}}{(2n)!} = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \cdots$	$x \in \mathbb{R}$
$\frac{1}{1-x} = \sum_{n=0}^{\infty} x^n = 1 + x + x^2 + x^3 + x^4 + \cdots$	$x \in]-1, 1[$