

PRIMITIVES DES FONCTIONS USUELLES

Fonction f	Primitives F
x^α ($\alpha \neq -1$)	$\frac{1}{\alpha + 1} x^{\alpha+1} + c$
$\frac{1}{x}$	$\ln x + c$
$\frac{1}{x^2}$	$-\frac{1}{x} + c$
$\frac{1}{x^n}$ ($n \neq 1$)	$\frac{-1}{(n-1)x^{n-1}} + c$
$\frac{1}{\sqrt{x}}$	$2\sqrt{x} + c$
e^x	$e^x + c$
e^{ax+b}	$\frac{1}{a} e^{ax+b} + c$
$\sin(x)$	$-\cos(x) + c$
$\cos(x)$	$\sin(x) + c$
$\sin(ax+b)$	$-\frac{1}{a} \cos(ax+b) + c$
$\cos(ax+b)$	$\frac{1}{a} \sin(ax+b) + c$
$\frac{1}{\cos^2(x)}$	$\tan(x) + c$
$\tan(x)$	$-\ln(\cos(x)) + c$
$\operatorname{ch}(x)$	$\operatorname{sh}(x) + c$
$\operatorname{sh}(x)$	$\operatorname{ch}(x) + c$

Fonction f	Primitives F
$\frac{1}{\sqrt{1-x^2}}$	$\arcsin(x) + c$
$-\frac{1}{\sqrt{1-x^2}}$	$\arccos(x) + c$
$\frac{1}{1+x^2}$	$\arctan(x) + c$
$u'(x)u(x)$	$\frac{1}{2} u^2(x) + c$
$\frac{u'(x)}{u(x)}$	$\ln u(x) + c$
$u'(x)u^\alpha(x)$	$\frac{1}{\alpha+1} u^{\alpha+1}(x) + c$
$u'(x)e^{u(x)}$	$e^{u(x)} + c$
$u'(x)\sin(u(x))$	$-\cos(u(x)) + c$
$u'(x)\cos(u(x))$	$\sin(u(x)) + c$
$\frac{u'(x)}{\cos^2(u(x))}$	$\tan(u(x)) + c$
$u'(x)\operatorname{ch}(u(x))$	$\operatorname{sh}(u(x)) + c$
$u'(x)\operatorname{sh}(u(x))$	$\operatorname{ch}(u(x)) + c$
$\frac{u'(x)}{\sqrt{1-u^2(x)}}$	$\arcsin(u(x)) + c$
$-\frac{u'(x)}{\sqrt{1-u^2(x)}}$	$\arccos(u(x)) + c$
$\frac{u'(x)}{1+u^2(x)}$	$\arctan(u(x)) + c$