Tableau des dérivées

$(x^n)' = n.x^{n-1} \quad \forall x \in \mathbb{R} \quad \forall n \in \mathbb{N}\backslash\{1\}$	$\mathbf{(U^n)' = n.U'.U^{n-1}}$, $\mathbf{U(I)} \subseteq \mathbb{R}$
$(\sqrt{x})' = \frac{1}{2\sqrt{x}} \quad \forall x \in]\,0\,;+\infty[\, = \mathbb{R}_+^*$	$\mathbf{(\sqrt{U})' = \frac{U'}{2\sqrt{U}}}$, $\mathbf{U(I)} \subseteq]\,0\,;+\infty[\, = \mathbb{R}_+^*$
$\left(\frac{1}{x}\right)' = -\frac{1}{x^2} \quad \forall x \in \mathbb{R}^*$	$\mathbf{\left(\frac{1}{U}\right)' = \frac{-U'}{U^2}}$, $\mathbf{U(I)} \subseteq \mathbb{R}^*$
$(e^x)' = e^x \quad \forall x \in \mathbb{R}$	$\mathbf{(e^U)' = U'.e^U}$, $\mathbf{U(I)} \subseteq \mathbb{R}$
$(\ln(x))' = \frac{1}{x} \quad \forall x \in]\,0\,;+\infty[\, = \mathbb{R}_+^*$	$\mathbf{(\ln(U))' = \frac{U'}{U}}$, $\mathbf{U(I)} \subseteq]\,0\,;+\infty[\, = \mathbb{R}_+^*$
$(\sin(x))' = \cos(x) \quad \forall x \in \mathbb{R}$	$\mathbf{(\sin(U))' = U'.\cos(U)}$, $\mathbf{U(I)} \subseteq \mathbb{R}$
$(\cos(x))' = -\sin(x) \quad \forall x \in \mathbb{R}$	$\mathbf{(\cos(U))' = -U'.\sin(U)}$, $\mathbf{U(I)} \subseteq \mathbb{R}$
$(\tan(x))' = \frac{1}{\cos^2(x)} = 1 + \tan^2(x)$ $\forall x \in \mathbb{R} - \left\{\frac{\pi}{2} + k\pi; k\epsilon\mathbb{Z}\right\}$	$\mathbf{(\tan(U))' = \frac{U'}{\cos^2(U)} = \left(1 + \tan^2(U)\right).U'}$ $\mathbf{U(I)} \subseteq \mathbb{R} - \left\{\frac{\pi}{2} + k\pi; k\epsilon\mathbb{Z}\right\}$

Tableau des Primitives

$\int x^{\alpha}.dx = \frac{x^{\alpha+1}}{\alpha+1} + cte \; ; \; \alpha \neq -1$	$\int U'.U^{\alpha} dx = \frac{U^{\alpha+1}}{\alpha+1} + cte \; ; \; \alpha \neq -1$
$\int \frac{1}{2\sqrt{x}} dx = \sqrt{x} + cte$	$\int \frac{U'}{2\sqrt{U}} dx = \sqrt{U} + cte$
$\int e^{x}.dx = e^{x} + cte$	$\int U'.e^{U}.dx = e^{U} + cte$
$\int \frac{1}{x} dx = \ln(\|x\|) + cte$	$\int \frac{U'}{U} dx = \ln(\|U\|) + cte$
$\int \frac{1}{x^2} dx = - \frac{1}{x} + cte$	$\int \frac{U'}{U^2} dx = - \frac{1}{U} + cte$
$\int \cos(x).dx = \sin(x) + cte$	$\int U'.\cos(U).dx = \sin(U) + cte$
$\int \sin(x).dx = -\cos(x) + cte$	$\int U'.\sin(U).dx = -\cos(U) + cte$
$\int \frac{1}{\cos^2(x)}.dx = \tan(x) + cte$	$\int \frac{U'}{\cos^2(U)}.dx = \tan(U) + cte$
$\int (1 + \tan^2(x)).dx = \tan(x) + cte$	$\int U'.(1 + \tan^2(U)).dx = \tan(U) + cte$
$\int \frac{1}{1+x^2}.dx = \arctan(x) + cte$	$\int \frac{U'}{1+U^2}.dx = \arctan(U) + cte$