(Dans les formules, u, v, f, g sont des fonctions réelles dérivables)

- $(u.v)' = \quad u'.v + u.v'$
- $\left(\dfrac{f}{g}\right)' = \quad \dfrac{f'g - fg'}{g^2}$
- $\left(\dfrac{f}{g}\right)' = \quad \dfrac{-g'}{g^2}$
- $(\sqrt{x})' = \dfrac{1}{2\sqrt{x}}$ sur $]0,\ +\infty[\quad (= \mathbb{R}_+^*)$
- $(\sqrt{u})' = \quad \dfrac{u'}{2\sqrt{u}}$
- $\left(\dfrac{1}{x}\right)' = \quad \dfrac{-1}{x^2}$ sur $\mathbb{R}^*$
- $\left(\dfrac{1}{u}\right)' = \dfrac{-u'}{u^2}$
- $(\ln x)' = \quad \dfrac{1}{x}$ sur $]0,\ +\infty[= \mathbb{R}_+^*$
- $(\ln u)' = \dfrac{u'}{u}$
- $(\exp x)' = \exp x$ sur $\mathbb{R}$
- $(\exp u)' = \exp u \times u'$
- $(x^n)' = n.x^{n-1}$
- $(u^n)' = n.u^{n-1}.u'$
- $\left(\dfrac{1}{x^n}\right)' = \quad (x^{-n})' = (-n)x^{-n-1} = \boxed{\dfrac{-n}{x^{n+1}}}$
- $(a^x)' = \left(\mathrm{e}^{x\ln a}\right)' = (\ln a).\mathrm{e}^{x\ln a} = \boxed{(\ln a).a^x}$ sur $\mathbb{R}$ et $a > 0$
- $(\sin x)' = \cos x$ sur $\mathbb{R}$
- $(\cos x)' = \quad -\sin x$ sur $\mathbb{R}$
- $(\tan x)' = \quad 1 + \tan^2 x = \dfrac{1}{\cos^2 x}$
- $\varphi(x) = (f(g(x)) \qquad \varphi'(x) = \quad f'(g(x)) \times g'(x)$
- $\varphi(x) = f(\mathrm{e}^x) \qquad \varphi'(x) = \quad f'(e^x)\ \mathrm{e}^x$
- $\varphi(x) = f(\ln x) \qquad \varphi'(x) = f'(\ln x)\ \dfrac{1}{x}$
- $\varphi(x) = f(x^2) \qquad \varphi'(x) = f'(x^2).2x$