

$(C)' = 0; \quad (C.u)' = C.u'; \quad \left(\frac{u}{C}\right)' = \frac{u'}{C};$	
$(u \pm v)' = u' \pm v'; \quad (u.v)' = u'.v + u.v'; \quad \left(\frac{u}{v}\right)' = \frac{u'.v - u.v'}{v^2};$	
$(x^\alpha)' = \alpha.x^{\alpha-1}$	$x' = 1; \quad (x^2)' = 2x; \quad (x^3)' = 3x^2; \quad \quad (x^n)' = nx^{n-1};$ $\left(\frac{1}{x}\right)' = -\frac{1}{x^2}; \quad \left(\frac{1}{x^2}\right)' = -\frac{2}{x^3}; \quad \quad \left(\frac{1}{x^n}\right)' = -\frac{n}{x^{n+1}};$ $(\sqrt{x})' = \frac{1}{2\sqrt{x}}; \quad (\sqrt[3]{x})' = \frac{1}{3\sqrt[3]{x^2}}; \quad \quad (\sqrt[n]{x})' = \frac{1}{n\sqrt[n]{x^{n-1}}};$
$(e^x)' = e^x; \quad (a^x)' = a^x \cdot \ln a;$ $(\ln x)' = \frac{1}{x}; \quad (\log_a x)' = \frac{1}{x \cdot \ln a}$	
$(\sin x)' = \cos x; \quad (tgx)' = \frac{1}{\cos^2 x}; \quad (\cot gx)' = -\frac{1}{\sin^2 x};$ $(\cos x)' = -\sin x;$	
$(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}; \quad (\arccos x)' = -\frac{1}{\sqrt{1-x^2}};$ $(arctgx)' = \frac{1}{1+x^2}; \quad (arc \cot gx)' = -\frac{1}{1+x^2};$	
$(x^x)' = \left(e^{\ln x^x}\right)' = \left(e^{x \ln x}\right)' = e^{x \ln x} (x \cdot \ln x)' = x^x (\ln x + 1);$ $(a(x)^{f(x)})' = \left(e^{\ln a(x)^{f(x)}}\right)' = \left(e^{f(x) \cdot \ln a(x)}\right)' = e^{f \cdot \ln a} (f \cdot \ln a)' = a^f \left(f' \cdot \ln a + f \cdot \frac{a'}{a}\right);$	