

المشتقات

$(a)' = 0$ $(a \cdot f(x))' = a \cdot f'(x)$ $(f(x) \pm g(x))' = f'(x) \pm g'(x)$	$(f(x) \cdot g(x))' = f'(x) \cdot g(x) + g'(x) \cdot f(x)$ $\left(\frac{f(x)}{g(x)}\right)' = \frac{f'(x) \cdot g(x) - g'(x) \cdot f(x)}{(g(x))^2}$
$(x^n)' = n \cdot x^{n-1}$ $(f(x)^n)' = n \cdot f(x)^{n-1} \cdot f'(x)$	
$\left(\frac{1}{x}\right)' = -\frac{1}{x^2}$	
$\left(\frac{1}{x^n}\right)' = \frac{-n}{x^{n+1}}$ $\left(\frac{1}{f(x)^n}\right)' = \frac{-n}{f(x)^{n+1}} \cdot f'(x)$	
$(\sqrt{x})' = \frac{1}{2\sqrt{x}}$ $(\sqrt{f(x)})' = \frac{1}{2\sqrt{f(x)}} \cdot f'(x)$	
$\left(\frac{1}{\sqrt{x}}\right)' = \frac{1}{2\sqrt{x^3}}$ $\left(\frac{1}{\sqrt{f(x)}}\right)' = \frac{1}{2\sqrt{f(x)^3}} \cdot f'(x)$	