Operace s derivacemi

Nechť existují derivace $f'(x_0), g'(x_0), \varphi'(x_0), f'\big(\varphi(x_0)\big)$

- $(cf)'(x_0) = cf'(x_0)$

- $(f \pm g)'(x_0) = f'(x_0) \pm g'(x_0)$

- $(fg)'(x_0) = f'(x_0)g(x_0) + f(x_0)g'(x_0)$

- $\left(\dfrac{f}{g}\right)'(x_0) = \dfrac{f'(x_0)g(x_0) - f(x_0)g'(x_0)}{g(x_0)^2}$

- $(f \circ \varphi)'(x_0) = f'\big(\varphi(x_0)\big)\varphi'(x_0)$

- $(f^{-1})\prime(x_0) = \dfrac{1}{f'\big(f^{-1}(x_0)\big)} = \dfrac{1}{f'(y_0)}$