Přehled vzorců pro derivování elementárních funkcí

I. $\quad [c]' = 0$

II. $\quad [x^n]' = nx^{n-1}$

III. $\quad [a^x]' = a^x \ln a$

IV. $\quad [e^x]' = e^x$

V. $\quad [\log_a x]' = \dfrac{1}{x \ln a}$

VI. $\quad [\ln x]' = \dfrac{1}{x}$

VII. $\quad [\sin x]' = \cos x$

VIII. $\quad [\cos x]' = -\sin x$

IX. $\quad [tg\, x]' = \dfrac{1}{\cos^2 x}$

X. $\quad [\cot g\, x]' = -\dfrac{1}{\sin^2 x}$

XI. $\quad [\arcsin x]' = \dfrac{1}{\sqrt{1-x^2}}$

XII. $\quad [\arccos x]' = -\dfrac{1}{\sqrt{1-x^2}}$

XIII. $\quad [arctg\, x]' = \dfrac{1}{1+x^2}$

XIV. $\quad [arc\cot g\, x]' = -\dfrac{1}{1+x^2}$

XV. $\quad \left[f(x)^{g(x)}\right]' = f(x)^{g(x)}\left[g'(x)\ln f(x) + g(x)\dfrac{f'(x)}{f(x)}\right], \qquad f(x) > 0$

Pravidla pro počítání s derivacemi

I. $\quad (u_1 + u_2 + \ldots + u_n)' = u_1' + u_2' + \ldots + u_n'$

II. $\quad (uv)' = u'v + uv' \qquad\qquad [cu(x)]' = c \cdot u'(x)$

III. $\quad \left(\dfrac{u}{v}\right)' = \dfrac{u'v - uv'}{v^2} \qquad\qquad \left(\dfrac{u(x)}{c}\right)' = \dfrac{u'(x)}{c}$