

TABEL DERIVATE

1.	$(c)' = 0$	1.	$(u(x) + c)' = u'(x)$
2.	$(x)' = 1$	2.	$(c \cdot u(x))' = c \cdot u'(x)$
3.	$(x^n)' = n \cdot x^{n-1}, n \in \mathbb{N}$	3.	$(u^n(x))' = n \cdot u^{n-1}(x) \cdot u'(x), n \in \mathbb{N}$
4.	$\left(\frac{1}{x}\right)' = -\frac{1}{x^2}$	4.	$\left(\frac{1}{u(x)}\right)' = -\frac{1}{u^2(x)} \cdot u'(x)$
5.	$\left(\frac{1}{x^n}\right)' = -\frac{n}{x^{n+1}}, n \in \mathbb{N}$	5.	$\left(\frac{1}{u^n(x)}\right)' = -\frac{n}{u^{n+1}(x)} \cdot u'(x), n \in \mathbb{N}$
6.	$(\sqrt{x})' = \frac{1}{2\sqrt{x}}$	6.	$(\sqrt{u(x)})' = \frac{1}{2\sqrt{u(x)}} \cdot u'(x)$
7.	$(\sqrt[n]{x})' = \frac{1}{n \sqrt[n]{x^{n-1}}}, n \in \mathbb{N}$	7.	$(\sqrt[n]{u(x)})' = \frac{1}{n \sqrt[n]{u^{n-1}(x)}} \cdot u'(x), n \in \mathbb{N}$
8.	$(x^\alpha)' = \alpha \cdot x^{\alpha-1}, \alpha \in \mathbb{R}$	8.	$(u^\alpha(x))' = \alpha \cdot u^{\alpha-1}(x) \cdot u'(x), \alpha \in \mathbb{R}$
9.	$(e^x)' = e^x$	9.	$(e^{u(x)})' = e^{u(x)} \cdot u'(x)$
10.	$(a^x)' = a^x \cdot \ln(a), a > 0$	10.	$(a^{u(x)})' = a^{u(x)} \cdot \ln(a) \cdot u'(x), a > 0$
11.	$(\ln(x))' = \frac{1}{x}$	11.	$(\ln(u(x)))' = \frac{1}{u(x)} \cdot u'(x)$
12.	$(\log_a(x))' = \frac{1}{x \cdot \ln(a)}, a > 0, a \neq 1$	12.	$(\log_a(u(x)))' = \frac{1}{u(x) \cdot \ln(a)} \cdot u'(x), a > 0, a \neq 1$
13.	$(\sin(x))' = \cos(x)$	13.	$(\sin(u(x)))' = \cos(u(x)) \cdot u'(x)$
14.	$(\cos(x))' = -\sin(x)$	14.	$(\cos(u(x)))' = -\sin(u(x)) \cdot u'(x)$
15.	$(\operatorname{tg}(x))' = \frac{1}{\cos^2(x)} = 1 + \operatorname{tg}^2(x)$	15.	$(\operatorname{tg}(u(x)))' = \frac{1}{\cos^2(u(x))} \cdot u'(x)$
16.	$(\operatorname{ctg}(x))' = -\frac{1}{\sin^2(x)} = -1 - \operatorname{ctg}^2(x)$	16.	$(\operatorname{ctg}(u(x)))' = -\frac{1}{\sin^2(u(x))} \cdot u'(x)$
17.	$(\arcsin(x))' = \frac{1}{\sqrt{1-x^2}}$	17.	$(\arcsin(u(x)))' = \frac{1}{\sqrt{1-u^2(x)}} \cdot u'(x)$
18.	$(\arccos(x))' = -\frac{1}{\sqrt{1-x^2}}$	18.	$(\arccos(u(x)))' = -\frac{1}{\sqrt{1-u^2(x)}} \cdot u'(x)$
19.	$(\operatorname{arctg}(x))' = \frac{1}{x^2+1}$	19.	$(\operatorname{arctg}(u(x)))' = \frac{1}{u^2(x)+1} \cdot u'(x)$
20.	$(\operatorname{arcctg}(x))' = -\frac{1}{x^2+1}$	20.	$(\operatorname{arcctg}(u(x)))' = -\frac{1}{u^2(x)+1} \cdot u'(x)$