

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