

1. $C' = 0$
2. $x' = 1$
3. $(\sqrt{x})' = \frac{1}{2\sqrt{x}}$
4. $(a^x)' = a^x \ln a$
5. $(x^\alpha)' = \alpha \cdot x^{\alpha-1}, x \in R$
6. $(e^x)' = e^x$
7. $(\log_a x)' = \frac{1}{x \cdot \ln a}$
8. $(\ln x)' = \frac{1}{x}$
9. $(\sin x)' = \cos x$
10. $(\cos x)' = -\sin x$

11. $(\operatorname{tg} x)' = \frac{1}{\cos^2 x}$
12. $(\operatorname{ctg} x)' = -\frac{1}{\sin^2 x}$
13. $(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$
14. $(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$
15. $(\operatorname{arctg} x)' = \frac{1}{1+x^2}$
16. $(\operatorname{arcctg} x)' = -\frac{1}{1+x^2}$
17. $(\operatorname{sh} x)' = \operatorname{ch} x$
18. $(\operatorname{ch} x)' = \operatorname{sh} x$
19. $(\operatorname{th} x)' = \frac{1}{\operatorname{ch}^2 x}$
20. $(\operatorname{cth} x)' = -\frac{1}{\operatorname{sh}^2 x}$