

Türev

1. $\frac{d}{dx} u^n = nu^{n-1}u'$
2. $\frac{d}{dx} (uv) = v\frac{du}{dx} + u\frac{dv}{dx}$
3. $\frac{d}{dx} \left(\frac{u}{v}\right) = \frac{v\frac{du}{dx} - u\frac{dv}{dx}}{v^2}$
4. $\frac{d}{dx} \ln u = \frac{u'}{u}$
5. $\frac{d}{dx} e^u = u'e^u$
6. $\frac{d}{dx} \sin u = \cos u \frac{du}{dx}$
7. $\frac{d}{dx} \cos u = -\sin u \frac{du}{dx}$
8. $\frac{d}{dx} \tan u = (1 + \tan^2 u) \frac{du}{dx} = \sec^2 u \frac{du}{dx}$
9. $\frac{d}{dx} \cot u = -(1 + \cot^2 u) \frac{du}{dx} = -\csc^2 u \frac{du}{dx}$
10. $\frac{d}{dx} \sec u = \sec u \tan u \frac{du}{dx}$
11. $\frac{d}{dx} \csc u = -\csc u \cot u \frac{du}{dx}$
12. $\frac{d}{dx} \arcsin u = \frac{1}{\sqrt{1-u^2}} \frac{du}{dx}$
13. $\frac{d}{dx} \arccos u = -\frac{1}{\sqrt{1-u^2}} \frac{du}{dx}$
14. $\frac{d}{dx} \arctan u = \frac{1}{1+u^2} \frac{du}{dx}$

