



Türev Tablosu

$u = u(x), v = v(x)$ ise

$$1. \quad y = u + v \quad y' = u' + v'$$

$$2. \quad y = c \cdot v \quad y' = c \cdot u'$$

$$3. \quad y = c \quad y' = 0$$

$$4. \quad y = u \cdot v \quad y' = u' \cdot v + u \cdot v'$$

$$5. \quad y = \frac{u}{v} \quad y' = \frac{u' \cdot v - u \cdot v'}{v^2}$$

$$6. \quad y = f(u), \quad u = f(x) \quad y' = \frac{df}{dx} = \frac{df}{du} * \frac{du}{dx}$$

$$7. \quad y = u^n \quad y' = n \cdot u^{n-1} \cdot u'$$

$$8. \quad y = \sin(u) \quad y' = u' \cdot \cos(u)$$

$$9. \quad y = \cos(u) \quad y' = -u' \sin(u)$$

$$10. \quad y = \tan(u) \quad y' = u' (1 + \tan^2(u)) = u' \cdot \sec^2(u)$$

$$11. \quad y = \cot(u) \quad y' = -u' (1 + \cot^2(u)) = -u' \cdot \operatorname{cosec}^2(u)$$

$$12. \quad y = \sec(u) \quad y' = u' \cdot \sec(u) \cdot \tan(u)$$

$$13. \quad y = \operatorname{cosec}(u) \quad y' = -u' \cdot \operatorname{cosec}(u) \cdot \cot(u)$$

$$14. \quad y = \arcsin(u) \quad y' = \frac{u'}{\sqrt{1-u^2}}$$

$$15. \quad y = \arccos(u) \quad y' = \frac{-u'}{\sqrt{1-u^2}}$$

$$16. \quad y = \arctan(u) \quad y' = \frac{u'}{1+u^2}$$

$$17. \quad y = \operatorname{arccot}(u) \quad y' = \frac{-1}{1+u^2}$$

$$18. \quad y = \operatorname{arcsec}(u) \quad y' = \frac{1}{|x|\sqrt{x^2-1}}$$

$$19. \quad y = \operatorname{arccsc}(u) \quad y' = \frac{-1}{|x|\sqrt{x^2-1}}$$

$$20. \quad y = \log_a(u) \quad y' = \frac{u'}{u} \log_a e$$

$$21. \quad y = \ln(u) \quad y' = \frac{u'}{u}$$

$$22. \quad y = a^u \quad y' = u' \cdot a^u \cdot \ln(a)$$

$$23. \quad y = e^u \quad y' = u' \cdot e^u$$

$$24. \quad y = u^v \quad y' = u^v \cdot (1 + \ln(u))$$

_____ Trigonometrik Fonk.

_____ Üstel Fonk.

_____ Hiperbolik Fonk.

$$y = \sinh(u) \quad y' = \cosh(u) \quad y = \operatorname{arcsinh}(u) \quad y' = \frac{1}{\sqrt{u^2+1}}$$

$$y = \cosh(u) \quad y' = \sinh(u) \quad y = \operatorname{arccosh}(u) \quad y' = \frac{1}{\sqrt{u^2-1}}$$

$$y = \tanh(u) \quad y' = \operatorname{sech}^2(u) \quad y = \operatorname{arctanh}(u) \quad y' = \frac{1}{1-u^2}$$

$$y = \operatorname{sech}(u) \quad y' = -\tanh(u) \cdot \operatorname{sech}(u) \quad y = \operatorname{arcsech}(u) \quad y' = \frac{1}{u\sqrt{1-u^2}}$$

$$y = \operatorname{coth}(u) \quad y' = -\operatorname{csch}^2(u) \quad y = \operatorname{arccoth}(u) \quad y' = \frac{1}{1-u^2}$$

$$y = \operatorname{csch}(u) \quad y' = -\operatorname{coth}(u) \cdot \operatorname{csch}(u) \quad y = \operatorname{arccsch}(u) \quad y' = \frac{-1}{|x|\sqrt{1+u^2}}$$

Kaynakça:

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http://tr.wikipedia.org/wiki/T%C3%BCrev_Tablosu

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