Formulario Derivadas

$$\frac{d}{dx}[\log_a u] = \frac{u'}{(\ln a)u}$$

$$\frac{d}{dx}[a^u] = (\ln a)a^u u'$$

$$\frac{d}{dx}[\sin u] = (\cos u)u'$$

$$\frac{d}{dx}[\cos u] = (-\sin u)u'$$

$$\frac{d}{dx}[\tan u] = (\sec^2 u)u'$$

$$\frac{d}{dx}[\cot u] = -(\csc^2 u)u'$$

$$\frac{d}{dx}[\sec u] = (\sec u \tan u)u'$$

$$\frac{d}{dx}[\csc u] = -(\csc u \cot u)u'$$

$$\frac{d}{dx}[\arcsin u] = \frac{u'}{\sqrt{1-u^2}}$$

$$\frac{d}{dx}[\arccos u] = \frac{-u'}{\sqrt{1-u^2}}$$

$$\frac{d}{dx}[\arctan u] = \frac{u'}{1+u^2}$$

$$\frac{d}{dx}[\operatorname{arccot} u] = \frac{-u'}{1+u^2}$$

$$\frac{d}{dx}[\operatorname{arcsec} u] = \frac{u'}{|u|\sqrt{u^2-1}}$$

$$\frac{d}{dx}[e^u] = e^u * u'$$

$$\frac{d}{dx}[ln\, u] = \frac{u'}{u}$$

$$\frac{d}{dx}[\operatorname{arccsc} u] = \frac{-u'}{|u|\sqrt{u^2-1}}$$

$$\frac{d}{dx}[\sinh u] = (\cosh u)u'$$

$$\frac{d}{dx}[\cosh u] = (\sinh u)u'$$

$$\frac{d}{dx}[\tanh u] = (\operatorname{sech}^2 u)u'$$

$$\frac{d}{dx}[\coth u] = -(\operatorname{csch}^2 u)u'$$

$$\frac{d}{dx}[\operatorname{sech} u] = -(\operatorname{sech} u \tanh u)u'$$

$$\frac{d}{dx}[\operatorname{csch} u] = -(\operatorname{csch} u \coth u)u'$$

$$\frac{d}{dx}[\sinh^{-1} u] = \frac{u'}{\sqrt{u^2+1}}$$

$$\frac{d}{dx}[\cosh^{-1} u] = \frac{u'}{\sqrt{u^2-1}}$$

$$\frac{d}{dx}[\tanh^{-1} u] = \frac{u'}{1-u^2}$$

$$\frac{d}{dx}[\coth^{-1} u] = \frac{u'}{1-u^2}$$

$$\frac{d}{dx}[\operatorname{sech}^{-1} u] = \frac{-u'}{u\sqrt{1-u^2}}$$

$$\frac{d}{dx}[\operatorname{csch}^{-1} u] = \frac{u'}{|u|\sqrt{1+u^2}}$$