

# Ableiten

$$(u \cdot v)' = u' \cdot v + u \cdot v'$$

$$(u \pm v)' = u' \pm v'$$

$$\left(\frac{u}{v}\right)' = \frac{v \cdot u' - v' \cdot u}{v^2}$$

$$(f \circ g)'(x) = (f' \circ g) \cdot g'$$

$$(c \cdot f)' = c \cdot f' \quad (\text{falls } c = \text{const})$$

$$\text{pot } a' = a \cdot \text{pot } a^{-1}$$

$$\sin' = \cos$$

$$\cos' = -\sin$$

$$\tan' = \frac{1}{\cos^2}$$

$$\exp' = \exp$$

$$\log'(x) = \text{rez} \left(\frac{1}{x}\right)$$

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

$$\arccos'(z) = \frac{-1}{\sqrt{1-z^2}}$$

$$\arctan'(a) = \frac{1}{1+a^2}$$

$$\text{const } c' = \text{const } 0$$

$$\text{variable}'(a) = 1$$

$$a\sqrt{\quad}' = \frac{1}{a} \text{pot } \frac{1}{a} - 1$$

$$\text{id}' = \text{id}$$

$$\text{Ch}' = \text{Sh}$$

$$\text{ArSh}'(z) = \frac{1}{\sqrt{1+z^2}}$$

$$\text{Sh}' = \text{Ch}$$

$$\text{ArCh}'(z) = \frac{1}{\sqrt{z^2-1}}$$

$$\text{ArTh}'(z) = \frac{1}{1-z^2}$$

$$(F^{-1})' = \frac{1}{F' \circ F^{-1}}$$

$$\text{Th}' = \frac{1}{\text{Ch}^2}$$