



TABLA DE DERIVADAS

$$y = k \rightarrow y' = 0$$

$$y = k \cdot x \rightarrow y' = k$$

$$y = k \cdot u \rightarrow y' = k \cdot u'$$

$$y = u \pm v \rightarrow y' = u' \pm v'$$

$$y = u \cdot v \rightarrow y' = u' \cdot v + u \cdot v'$$

$$y = \frac{u}{v} \rightarrow y' = \frac{u' \cdot v - u \cdot v'}{v^2}$$

$$y = x^n \rightarrow y' = n \cdot x^{n-1}$$

$$y = u^n \rightarrow y' = n \cdot u^{n-1} \cdot u'$$

$$y = \frac{1}{x} \rightarrow y' = -\frac{1}{x^2}$$

$$y = \frac{1}{u} \rightarrow y' = -\frac{1}{u^2} \cdot u'$$

$$y = \sqrt{x} \rightarrow y' = \frac{1}{2\sqrt{x}}$$

$$y = \sqrt{u} \rightarrow y' = \frac{1}{2\sqrt{u}} \cdot u'$$

$$y = \sqrt[n]{u} \rightarrow y' = \frac{u'}{n\sqrt[n]{u^{n-1}}}$$

$$y = a^x \rightarrow y' = a^x \cdot \ln a$$

$$y = a^u \rightarrow y' = u' \cdot a^u \cdot \ln a$$

$$y = e^x \rightarrow y' = e^x$$

$$y = e^u \rightarrow y' = u' \cdot e^u$$

$$y = u^v \rightarrow y' = u^v \cdot v' \cdot \ln u + v \cdot u^{v-1} \cdot u'$$

$$y = \text{sen } x \rightarrow y' = \cos x$$

$$y = \text{sen } u \rightarrow y' = u' \cdot \cos u$$

$$y = \cos x \rightarrow y' = -\text{sen } x$$

$$y = \cos u \rightarrow y' = -u' \cdot \text{sen } u$$

$$y = \text{tg } x \rightarrow y' = \sec^2 x$$

$$y = \text{tg } u \rightarrow y' = u' \cdot \sec^2 u$$

$$y = \text{cosec } x \rightarrow y' = -\text{cosec } x \cdot \cot g x$$

$$y = \text{cosec } u \rightarrow y' = -u' \cdot \text{cosec } u \cdot \cot g u$$

$$y = \sec x \rightarrow y' = \sec x \cdot \text{tg } x$$

$$y = \sec u \rightarrow y' = u' \cdot \sec u \cdot \text{tg } u$$

$$y = \cot g x \rightarrow y' = -\text{cosec}^2 x$$

$$y = \cot g u \rightarrow y' = -u' \cdot \text{cosec}^2 u$$

$$y = \arcsen u \rightarrow y' = \frac{u'}{\sqrt{1-u^2}}$$

$$y = \arccos u \rightarrow y' = -\frac{u'}{\sqrt{1-u^2}}$$

$$y = \text{arctg } u \rightarrow y' = \frac{u'}{1+u^2}$$

$$y = \log_a u \rightarrow y' = \frac{u'}{u} \log_a e$$

$$y = \ln x \rightarrow y' = \frac{1}{x}$$

$$y = \ln u \rightarrow y' = \frac{u'}{u}$$