

$$\int \frac{d\varphi}{\cos \varphi} = \int \frac{d\varphi}{\sin\left(\varphi + \frac{\pi}{2}\right)} = \int \frac{d\varphi}{2 \cdot \sin\left(\frac{\varphi}{2} + \frac{\pi}{4}\right) \cdot \cos\left(\frac{\varphi}{2} + \frac{\pi}{4}\right)} =$$

$$\int \frac{d\varphi}{2 \cdot \sin\left(\frac{\varphi}{2} + \frac{\pi}{4}\right) \cdot \frac{\cos\left(\frac{\varphi}{2} + \frac{\pi}{4}\right)^2}{\cos\left(\frac{\varphi}{2} + \frac{\pi}{4}\right)}} =$$

Teniendo en cuenta que:

$$\left[\tan \theta = \frac{\sin \theta}{\cos \theta} \right]$$

$$\int \frac{d\varphi}{2 \cdot \tan\left(\frac{\varphi}{2} + \frac{\pi}{4}\right) \cdot \cos\left(\frac{\varphi}{2} + \frac{\pi}{4}\right)^2} =$$

La derivada de la función logaritmo neperiano es:

$$\frac{d}{dx}(\ln(f(x))) = \frac{1}{f(x)} f'(x)$$

Luego la primitiva es:

$$\frac{1}{2} \ln\left(\tan\left(\frac{\varphi}{2} + \frac{\pi}{4}\right)\right) + C$$