

TABLA DE INTEGRALES INMEDIATAS

Mariano Real Pérez

$$\int a \cdot dx = ax + C$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + C \quad (n \neq -1)$$

$$\int \frac{1}{x} dx = \ln|x| + C$$

$$\int \frac{1}{2\sqrt{x}} dx = \sqrt{x} + C$$

$$\int a^x dx = \frac{a^x}{\ln a} + C$$

$$\int e^x dx = e^x + C$$

$$\int \sin x dx = -\cos x + C$$

$$\int \cos x dx = \sin x + C$$

$$\int \sec^2 x dx = \tan x + C$$

$$\int \frac{1}{1+x^2} dx = \arctan x + C$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$$

$$\int [u(x)]^n \cdot u'(x) dx = \frac{[u(x)]^{n+1}}{n+1} + C$$

$$\int \frac{u'(x)}{u(x)} dx = \ln|u(x)| + C$$

$$\int \frac{u'(x)}{2\sqrt{u(x)}} dx = \sqrt{u(x)} + C$$

$$\int a^{u(x)} \cdot u'(x) dx = \frac{a^{u(x)}}{\ln a} + C$$

$$\int e^{u(x)} \cdot u'(x) dx = e^{u(x)} + C$$

$$\int \sin u(x) \cdot u'(x) dx = -\cos u(x) + C$$

$$\int \cos u(x) \cdot u'(x) dx = \sin u(x) + C$$

$$\int \sec^2 u(x) \cdot u'(x) dx = \tan u(x) + C$$

$$\int \frac{u'(x)}{1+[u(x)]^2} dx = \arctan u(x) + C$$

$$\int \frac{u'(x)}{\sqrt{1-[u(x)]^2}} dx = \arcsin u(x) + C$$