

Tabla de integrales

| | |
|---|--|
| $\int dx = x + C$ | $\int kdx = kx + C$ |
| $\int xdx = \frac{x^2}{2} + C$ | $\int x^2 dx = \frac{x^3}{3} + C$ |
| $\int x^n dx = \frac{x^{n+1}}{n+1} + C, (n \neq -1)$ | $\int u'u^n dx = \frac{u^{n+1}}{n+1} + C, (n \neq -1)$ |
| $\int \frac{1}{x} dx = \ln x + C$ | $\int \frac{u'}{u} dx = \ln u + C$ |
| $\int \frac{1}{x+a} dx = \ln x+a + C$ | $\int \frac{u'}{u+a} dx = \ln u+a + C$ |
| $\int e^x dx = e^x + C$ | $\int u'e^u dx = e^u + C$ |
| $\int a^x dx = \frac{a^x}{\ln a} + C, (a > 0, a \neq 1)$ | $\int u'a^u dx = \frac{a^u}{\ln a} + C, (a > 0, a \neq 1)$ |
| $\int \text{sen } x dx = -\cos x + C$ | $\int u' \text{sen } u dx = -\cos u + C$ |
| $\int \cos x dx = \text{sen } x + C$ | $\int u' \cos u dx = \text{sen } u + C$ |
| $\int \frac{1}{\cos^2 x} dx = \tan x + C$ | $\int \frac{u'}{\cos^2 u} dx = \tan u + C$ |
| $\int (1 + \tan^2 x) dx = \tan x + C$ | $\int u'(1 + \tan^2 u) dx = \tan u + C$ |
| $\int \frac{1}{\text{sen}^2 x} dx = -\text{cotan } x + C$ | $\int \frac{u'}{\text{sen}^2 u} dx = -\text{cotan } u + C$ |
| $\int \frac{1}{\sqrt{1-x^2}} dx = \arcsen x + C$ | $\int \frac{u'}{\sqrt{1-u^2}} dx = \arcsen u + C$ |
| $\int \frac{1}{1+x^2} dx = \arctan x + C$ | $\int \frac{u'}{1+u^2} dx = \arctan u + C$ |
| $\int \frac{1}{a^2+x^2} dx = \frac{1}{a} \arctan \frac{x}{a} + C$ | $\int \frac{u'}{a^2+u^2} dx = \frac{1}{a} \arctan \frac{u}{a} + C$ |
| Integral de la suma o resta | $\int (u \pm v) dx = \int u dx \pm \int v dx$ |
| Integración por partes | $\int u dv = uv - \int v du$ |
| Regla de Barrow | $\int_a^b f(x) dx = F(x) \Big _a^b = F(b) - F(a)$ |

Siendo: u, v funciones de x ; a, k, n, C constantes.