

CALCULO INTEGRAL - FORMULAS BÁSICAS DE INTEGRACIÓN

1.	$\int k dx = kx + C; \ donde \ k \ es \ constante$	12.	$\int \csc^2(x) \ dx = -\cot(x) + \mathbf{C}$
2.	$\int dx = x + C$	13.	$\int \sec(x)\tan(x)dx = \sec(x) + C$
3.	$\int x^n dx = \frac{x^{n+1}}{n+1}; n \neq -1$	14.	$\int \csc(x)\cot(x)dx = -\csc(x) + C$
4.	$\int \frac{1}{x} dx = \ln x + C$	15.	$\int \tan(x) dx = \ln \sec(x) + C = -\ln \cos(x) + C$
5.	$\int sen(x)dx = -\cos(x) + C$	16.	$\int \cot(x)dx = \ln sen(x) + C$
6.	$\int sen(kx)dx = -\frac{\cos(kx)}{k} + C$	17.	$\int \sec(x)dx = \ln \sec(x) + \tan(x) + C$
	$\int \cos(x) dx = sen(x) + C$		$\int \csc(x)dx = \ln \csc(x) - \cot(x) + C$
8.	$\int \cos(kx) dx = \frac{\operatorname{sen}(kx)}{k} + C$	19.	$\int \frac{1}{\sqrt{a^2 - x^2}} dx = arc sen\left(\frac{x}{a}\right) + C$
	$\int e^x dx = e^x + C$	20.	$\int \frac{1}{a^2 + x^2} dx = \frac{1}{a} \arctan\left(\frac{x}{a}\right) + C$
10.	$\int a^x dx = \frac{a^x}{\ln(a)} + C$	21.	$\int \frac{1}{x\sqrt{x^2 - a^2}} dx = \frac{1}{a} \arcsin\left(\frac{x}{a}\right) + C$
11.	$\int \sec^2(x)dx = \tan(x) + C$		

CICLO 02/2021

DEPARTAMENTO DE CIENCIAS BÁSICAS