

TABLA DE INTEGRALES INMEDIATAS

1.- $\int dx = x + C$	2.- $\int k \, dx = kx + C$
3.- $\int (f(x) \pm g(x)) \, dx = \int f(x) \, dx \pm \int g(x) \, dx$	4.- $\int k \cdot f(x) \, dx = k \cdot \int f(x) \, dx$
5.- $\int x^n \, dx = \frac{x^{n+1}}{n+1} + C \quad n \neq -1$	6.- $\int f'(x) \cdot f^n(x) \, dx = \frac{f^{n+1}(x)}{n+1} + C \quad n \neq -1$
7.- $\int \frac{1}{x} \, dx = \ln x + C$	8.- $\int \frac{f'(x)}{f(x)} \, dx = \ln f(x) + C$
9.- $\int a^x \, dx = \frac{a^x}{\ln a} + C$	10.- $\int f'(x) \cdot a^{f(x)} \, dx = \frac{a^{f(x)}}{\ln a} + C$
11.- $\int e^x \, dx = e^x + C$	12.- $\int f'(x) \cdot e^{f(x)} \, dx = e^{f(x)} + C$
13.- $\int \sin x \, dx = -\cos x + C$	14.- $\int f'(x) \cdot \sin f(x) \, dx = -\cos f(x) + C$
15.- $\int \cos x \, dx = \sin x + C$	16.- $\int f'(x) \cdot \cos f(x) \, dx = \sin f(x) + C$
17.- $\int \tan(x) \, dx = \int \frac{\sin x}{\cos x} \, dx = -\ln \cos x + C$	18.- $\int f'(x) \cdot \tan f(x) \, dx = -\ln \cos f(x) + C$
19.- $\int \frac{1}{\cos^2 x} \, dx = \tan x + C$	20.- $\int \frac{f'(x)}{\cos^2 f(x)} \, dx = \tan f(x) + C$
21.- $\int \frac{-1}{\sin^2 x} \, dx = \cot x + C$	22.- $\int \frac{-f'(x)}{\sin^2 f(x)} \, dx = \cot f(x) + C$
23.- $\int \frac{1}{\sqrt{1-x^2}} \, dx = \arcsin x + C$	24.- $\int \frac{f'(x)}{\sqrt{1-f^2(x)}} \, dx = \arcsin f(x) + C$
25.- $\int \frac{-1}{\sqrt{1-x^2}} \, dx = \arccos x + C$	26.- $\int \frac{-f'(x)}{\sqrt{1-f^2(x)}} \, dx = \arccos f(x) + C$
27.- $\int \frac{1}{1+x^2} \, dx = \operatorname{arctan} x + C$	28.- $\int \frac{f'(x)}{1+f^2(x)} \, dx = \operatorname{arctan} f(x)$