TABLA DE INTEGRALES INMEDIATAS

TIPOS	FORMAS	
	Simple	**Compuesta**
Potencial $n \neq -1$	$\int x^n dx = \dfrac{x^{n+1}}{n+1} + k$	$\int f'(x)f(x)^n \, dx = \dfrac{f(x)^{n+1}}{n+1} + k$
Logarítmico	$\int \dfrac{1}{x} dx = \int x^{-1} dx = \ln|x| + k$	$\int \dfrac{f'(x)}{f(x)} dx = \ln|f(x)| + k$
Exponencial	$\int e^x dx = e^x + k$ $\int a^x dx = \dfrac{a^x}{\ln a} + k$	$\int e^{f(x)} f'(x) dx = e^{f(x)} + k$ $\int a^{f(x)} f'(x) dx = \dfrac{a^{f(x)}}{\ln a} + k$
Seno	$\int \cos x \, dx = \operatorname{sen} x + k$	$\int \cos f(x) \cdot f'(x) dx = \operatorname{sen} f(x) + k$
Coseno	$\int \operatorname{sen} x \, dx = -\cos x + k$	$\int \operatorname{sen} f(x) \cdot f'(x) dx = -\cos f(x) + k$
Tangente	$\int \sec^2 x \, dx = \operatorname{tg} x + k$ $\int (1 + \operatorname{tg}^2 x) dx = \operatorname{tg} x + k$ $\int \dfrac{1}{\cos^2 x} dx = \operatorname{tg} x + k$	$\int \sec^2 f(x) \cdot f'(x) dx = \operatorname{tg} f(x) + k$ $\int \dfrac{f'(x)}{\cos^2 f(x)} dx = \operatorname{tg} f(x) + k$
Cotangente	$\int \operatorname{cosec}^2 x \, dx = -\operatorname{cotg} x + k$ $\int (1 + \operatorname{cosec}^2 x) dx = -\operatorname{cotg} x + k$ $\int \dfrac{1}{\operatorname{sen}^2 x} dx = -\operatorname{cotg} x + k$	$\int \operatorname{cosec}^2 f(x) \cdot f'(x) dx = -\operatorname{cotg} f(x) + k$ $\int (1 + \operatorname{cosec}^2 f(x)) f'(x) dx = -\operatorname{cotg} f(x) + k$ $\int \dfrac{f'(x)}{\operatorname{sen}^2 f(x)} dx = -\operatorname{cotg} f(x) + k$
Arco seno	$\int \dfrac{1}{\sqrt{1-x^2}} dx = \operatorname{arcsen} x + k$	$\int \dfrac{f'(x)}{\sqrt{1-f(x)^2}} dx = \operatorname{arcsen} f(x) + k$
Arco tangente	$\int \dfrac{1}{1+x^2} dx = \operatorname{arctg} x + k$ $\int \dfrac{1}{a^2 + x^2} dx = \dfrac{1}{a} \operatorname{arctg} \dfrac{x}{a} + k$	$\int \dfrac{f'(x)}{1 + f(x)^2} dx = \operatorname{arctg} f(x) + k$ $\int \dfrac{f'(x)}{a^2 + f(x)^2} dx = \dfrac{1}{a} \operatorname{arctg} \dfrac{f(x)}{a} + k$
Neperiano – Arco tangente	$\int \dfrac{Mx + N}{ax^2 + bx + c} dx = \text{neperiano} + \text{arco tangente} + k$ $M \neq 0, \quad ax^2 + bx + c \text{ irreducible}$	