

## TABLA DE INTEGRALES INMEDIATAS

| Funciones simples   | Funciones compuestas   |
|---|--|
| $\int dx = x + C$   |  |
| $\int k dx = kx + C$  |  |
| $\int x^n dx = \frac{x^{n+1}}{n+1} + C \quad n \neq -1$                         | $\int u^n \cdot u' \cdot dx = \frac{u^{n+1}}{n+1} + C \quad n \neq -1$                         |
| $\int \frac{1}{x} dx = \ln  x  + C$   | $\int \frac{u'}{u} dx = \ln  u  + C$   |
| $\int e^x dx = e^x + C$   | $\int e^u \cdot u' \cdot dx = e^u + C$   |
| $\int a^x dx = \frac{a^x}{\ln a} + C$   | $\int a^u \cdot u' \cdot dx = \frac{a^u}{\ln a} + C$   |
| $\int \cos x dx = \operatorname{sen} x + C$                                     | $\int \cos u \cdot u' \cdot dx = \operatorname{sen} u + C$                                     |
| $\int \operatorname{sen} x dx = -\cos x + C$                                    | $\int \operatorname{sen} u \cdot u' \cdot dx = -\cos u + C$                                    |
| $\int \frac{1}{\cos^2 x} dx = \operatorname{tg} x + C$                          | $\int \frac{1}{\cos^2 u} \cdot u' \cdot dx = \operatorname{tg} u + C$                          |
| $\int (1 + \operatorname{tg}^2 x) dx = \operatorname{tg} x + C$                 | $\int (1 + \operatorname{tg}^2 u) \cdot u' \cdot dx = \operatorname{tg} u + C$                 |
| $\int \frac{-1}{\operatorname{sen}^2 x} dx = \operatorname{cotg} x + C$         | $\int \frac{-1}{\operatorname{sen}^2 u} \cdot u' \cdot dx = \operatorname{cotg} u + C$         |
| $\int \frac{1}{1+x^2} dx = \operatorname{arc} \operatorname{tg} x + C$          | $\int \frac{1}{1+u^2} \cdot u' \cdot dx = \operatorname{arc} \operatorname{tg} u + C$          |
| $\int \frac{-1}{1+x^2} dx = \operatorname{arc} \operatorname{cotg} x + C$       | $\int \frac{-1}{1+u^2} \cdot u' \cdot dx = \operatorname{arc} \operatorname{cotg} u + C$       |
| $\int \frac{1}{\sqrt{1-x^2}} dx = \operatorname{arc} \operatorname{sen} x + C$  | $\int \frac{1}{\sqrt{1-u^2}} \cdot u' \cdot dx = \operatorname{arc} \operatorname{sen} u + C$  |
| $\int \frac{-1}{\sqrt{1-x^2}} dx = \operatorname{arc} \operatorname{cos} x + C$ | $\int \frac{-1}{\sqrt{1-u^2}} \cdot u' \cdot dx = \operatorname{arc} \operatorname{cos} u + C$ |