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

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