TABLA DE INTEGRALES 1

(1) $$\int (du + dv - dw) = \int du + \int dv - \int dw.$$

(2) $$\int a dv = a \int dv.$$

(3) $$\int dx = x + C.$$

(4) $$\int v^n dv = \frac{v^{n+1}}{n+1} + C. \qquad (n \neq$$

(5) $$\int \frac{dv}{v} = \ln v + C.$$
$$= \ln v + \ln c = \ln cv.$$
[Haciendo $C = \ln c$.]

(6) $$\int a^v \, dv = \frac{a^v}{\ln a} + C.$$

(7) $$\int e^v \, dv = e^v + C.$$

(8) $$\int \operatorname{sen} v \, dv = -\cos v + C.$$

(9) $$\int \cos v \, dv = \operatorname{sen} v + C.$$

(10) $$\int \sec^2 v \, dv = \operatorname{tg} v + C.$$

TABLA DE INTEGRALES 2

(11) $$\int \csc^2 v\, dv = -\operatorname{ctg} v + C.$$

(12) $$\int \sec v \operatorname{tg} v\, dv = \sec v + C.$$

(13) $$\int \csc v \operatorname{ctg} v\, dv = -\csc v + C.$$

(14) $$\int \operatorname{tg} v\, dv = -\ln \cos v + C = \ln \sec v + C.$$

(15) $$\int \operatorname{ctg} v\, dv = \ln \operatorname{sen} v + C.$$

(16) $$\int \sec v\, dv = \ln (\sec v + \operatorname{tg} v) + C.$$

(17) $$\int \csc v\, dv = \ln (\csc v - \operatorname{ctg} v) + C.$$

(18) $$\int \frac{dv}{v^2 + a^2} = \frac{1}{a} \operatorname{arc\,tg} \frac{v}{a} + C.$$

(19) $$\int \frac{dv}{v^2 - a^2} = \frac{1}{2a} \ln \frac{v - a}{v + a} + C. \qquad (v^2 > a^2)$$

(19a) $$\int \frac{dv}{a^2 - v^2} = \frac{1}{2a} \ln \frac{a + v}{a - v} + C. \qquad (v^2 < a^2)$$

(20) $$\int \frac{dv}{\sqrt{a^2 - v^2}} = \operatorname{arc\,sen} \frac{v}{a} + C.$$

(21) $$\int \frac{dv}{\sqrt{v^2 \pm a^2}} = \ln \left(v + \sqrt{v^2 \pm a^2}\right) + C.$$

(22) $$\int \sqrt{a^2 - v^2}\, dv = \frac{v}{2} \sqrt{a^2 - v^2} + \frac{a^2}{2} \operatorname{arc\,sen} \frac{v}{a} + C.$$

(23) $$\int \sqrt{v^2 \pm a^2}\, dv = \frac{v}{2} \sqrt{v^2 \pm a^2} \pm \frac{a^2}{2} \ln \left(v + \sqrt{v^2 \pm a^2}\right) + C.$$