FORMULARIO

CALCULO INTEGRAL

1. $\int du = u + C \qquad \text{ó} \qquad \int dx = x + C$

2. $\int a\,du = a \int du = au + C$

3. $\int (u + v - w)\,du = \int u\,du + \int v\,du - \int w\,du$

4. $\int v^{n}\, dv = \dfrac{v}{n+1} + C; \qquad \text{donde: } n \neq -1$

5. $\int \dfrac{du}{u} = \ln u + C$ (*Comprobar u & du*)

6. $\int e^{u}\, du = e^{u} + C$

7. $\int a^{u}\, du = \dfrac{a^{u}}{\ln a} + C$ *(a= Es Cualquier Numero)*

8. $\int sen\, u\, du = -\cos u + C \quad u\, du = sen\, u + C$

10. $\int \tan u\, du = \ln(\sec u) + C = -\ln(\cos u) + C$

11. $\int \cot u\, du = \ln(sen\, u) + C$ 12. $\int \sec u\, du = \ln(\sec u + \tan u) + C$

13. $\int \csc u\, du = \ln(\csc u - \cot u) + C$ 14. $\int \sec^{2}u\, du = \tan u + C$

15. $\int \csc^{2}u\, du = -\cot u + C$ 16. $\int \sec u \tan u\, du = \sec u + C$

17. $\int \csc u \cot u\, du = -\csc u + C$ 18. $\int \dfrac{du}{\sqrt{a^{2}-u^{2}}} = arc\, sen\, \dfrac{u}{a} + C$

19. $\int \dfrac{du}{a^{2}+u^{2}} = \dfrac{1}{a} arc\, \tan \dfrac{u}{a} + C$ 20. $\int \dfrac{du}{u\sqrt{u^{2}-a^{2}}} = \dfrac{1}{a} arc\, \sec \dfrac{u}{a} + C$