

Tabla de Integrales Indefinidas.

A continuación se presentan una tabla resumen de las integrales indefinidas más comunes, la que nos entregara en forma directa la integral de las diferentes funciones:

$$1. \int x^n \cdot dx = \frac{x^{n+1}}{n+1} + c$$

$$2. \int x^{-1} \cdot dx = \ln|x| + c$$

$$3. \int \operatorname{sen}x \cdot dx = -\cos x + c$$

$$4. \int \cos x \cdot dx = \operatorname{sen}x + c$$

$$5. \int \operatorname{tg}x \cdot dx = -\ln|\cos x| + c$$

$$6. \int \operatorname{ctg}x \cdot dx = \ln|\operatorname{sen}x| + c$$

$$7. \int \sec x \cdot dx = \ln(\sec x + \operatorname{tg}x) + c$$

$$8. \int \operatorname{cosec} x \cdot dx = -\ln(\operatorname{cosec} x - \operatorname{ctg} x) + c$$

$$9. \int \sec^2 x \cdot dx = \operatorname{tg}x + c$$

$$10. \int \operatorname{cosec}^2 x \cdot dx = -\operatorname{ctg}x + c$$

$$11. \int e^x \cdot dx = e^x + c$$

$$12. \int a^x \cdot dx = \frac{a^x}{\ln a} + c$$

$$13. \int \frac{dx}{1+x^2} = \operatorname{arctg}x + c$$

$$14. \int \frac{dx}{a^2 + x^2} = \frac{1}{a} \operatorname{arctg} \left(\frac{x}{a} \right) + c$$

$$15. \int \frac{dx}{a^2 - x^2} = \frac{1}{2a} \ln \left(\frac{a+x}{a-x} \right) + c$$

$$16. \int \frac{dx}{\sqrt{1-x^2}} = \operatorname{arc sen} x + c$$

$$17. \int \frac{dx}{\sqrt{a^2 - x^2}} = \operatorname{arc sen} \left(\frac{x}{a} \right) + c$$

$$18. \int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln(x + \sqrt{x^2 \pm a^2}) + c$$