

Integrales indefinidas de funciones trigonométricas

1. $\text{Sen}^2(x) + \text{Cos}^2(x) = 1$	11. $\text{Tan}\left(\frac{x}{2}\right) = \sqrt{\frac{1 - \text{Cos}(x)}{1 + \text{Cos}(x)}}$
2. $\text{Sen}(a \pm b) = \text{Sen}(a)\text{Cos}(b) \pm \text{Cos}(a)\text{Sen}(b)$	12. $\text{Tan}(2x) = \frac{2\text{Tan}(x)}{1 + \text{Tan}^2(x)}$
3. $\text{Cos}(a \pm b) = \text{Cos}(a)\text{Cos}(b) \mp \text{Sen}(a)\text{Sen}(b)$	13. $\text{Cos}^2\left(\frac{x}{2}\right) = \frac{1 + \text{Cos}(x)}{2}$
4. $\text{Sen}(2x) = 2\text{Sen}(x)\text{Cos}(x)$	14. $\text{Sen}^2\left(\frac{x}{2}\right) = \frac{1 - \text{Cos}(x)}{2}$
5. $\text{Cos}(2x) = \text{Cos}^2(x) - \text{Sen}^2(x)$	15. $1 + \text{Cot}^2(x) = \text{Csc}^2(x)$
6. $\text{Cos}^2(x) = \frac{1 + \text{Cos}(2x)}{2}$	16. $1 + \text{Tan}^2(x) = \text{Sec}^2(x)$
7. $\text{Sen}^2(x) = \frac{1 - \text{Cos}(2x)}{2}$	
8. $\text{Sen}(a)\text{Cos}(b) = \frac{\text{Sen}(a+b) + \text{Sen}(a-b)}{2}$	
9. $\text{Cos}(a)\text{Cos}(b) = \frac{\text{Cos}(a+b) + \text{Cos}(a-b)}{2}$	
10. $\text{Sen}(a)\text{Sen}(b) = \frac{\text{Cos}(a-b) - \text{Cos}(a+b)}{2}$	

Ejemplo

$$\begin{aligned} & \int \text{sen } 6x \, dx \\ &= \frac{1}{6} (-\text{cos } 6x) + c \\ &= \frac{1}{6} \text{cos } 6x + c \end{aligned}$$

Escribe el resultado de las siguientes integrales indefinidas de funciones trigonométricas.

$\int \cos\left(\frac{3}{2}x\right) dx$	
$\int (2 \cos - 5 \operatorname{sen} x) dx$	
$\int \sec 5x dx$	
$\int \operatorname{csc}^2(3 - 2x) dx$	