

Identidades Trigonométricas Fundamentales

1. $\csc(x) = \frac{1}{\sin(x)}$	2. $\sec(x) = \frac{1}{\cos(x)}$
3. $\tan(x) = \frac{\sin(x)}{\cos(x)}$	4. $\cot(x) = \frac{\cos(x)}{\tan(x)}$
5. $1 + \tan^2(x) = \sec^2(x)$	6. $1 + \cot^2(x) = \csc^2(x)$
7. $\sin(-x) = -\sin(x)$	8. $\cos(-x) = \cos(x)$
9. $\tan(-x) = -\tan(x)$	10. $\sin\left(\frac{\pi}{2} - x\right) = \cos(x)$
11. $\cos\left(\frac{\pi}{2} - x\right) = \sin(x)$	12. $\tan\left(\frac{\pi}{2} - x\right) = \cot(x)$

Fórmulas de Suma y Resta de Ángulos

1. $\sin(x + y) = \sin(x) \cos(y) + \cos(x) \sin(y)$	2. $\sin(x - y) = \sin(x) \cos(y) - \cos(x) \sin(y)$
3. $\cos(x + y) = \cos(x) \cos(y) - \sin(x) \sin(y)$	4. $\cos(x - y) = \cos(x) \cos(y) + \sin(x) \sin(y)$
5. $\tan(x + y) = \frac{\tan(x) + \tan(y)}{1 - \tan(x) \tan(y)}$	6. $\tan(x - y) = \frac{\tan(x) - \tan(y)}{1 + \tan(x) \tan(y)}$

Identidades de Productos

1. $\sin^2(x) = \frac{1}{2}(1 - \cos(2x))$	2. $\cos^2(x) = \frac{1}{2}(1 + \cos(2x))$
3. $\sin(x) \cos(x) = \frac{1}{2} \sin(2x)$	4. $\sin(x) \sin(y) = \frac{1}{2}(\cos(x - y) - \cos(x + y))$
5. $\sin(x) \cos(y) = \frac{1}{2}(\sin(x - y) + \sin(x + y))$	6. $\cos(x) \cos(y) = \frac{1}{2}(\cos(x - y) + \cos(x + y))$

Fórmulas del Doble de un Ángulo

1. $\sin(2x) = 2 \sin(x) \cos(x)$	2. $\cos(2x) = \cos^2(x) - \sin^2(x)$
3. $\cos(2x) = 2 \cos^2(x) - 1$	4. $\tan(2x) = \frac{2 \tan(x)}{1 - \tan^2(x)}$

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