Resumen de Identidades Trigonométricas

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Definiciones

- $\sec x \doteq \frac{1}{\cos x}$
- $\csc x \doteq \frac{1}{\sin x}$
- $\cot x \doteq \frac{1}{\tan x}$

Pitagóricas

- $\sin^2 x + \cos^2 x = 1$
- $\sec^2 x = 1 + \tan^2 x$

Desplazamientos

- $\sin(\theta \pm 2\pi) = \sin\theta$
- $\cos(\theta \pm 2\pi) = \cos\theta$
- $\sin(\theta \pm \pi) = -\sin\theta$
- $\cos(\theta \pm \pi) = -\cos\theta$
- $\sin(-\theta) = -\sin\theta$
- $\cos(-\theta) = \cos\theta$
- $\sin\left(\theta \pm \frac{\pi}{2}\right) = \pm\cos\theta$
- $\cos\left(\theta \pm \frac{\pi}{2}\right) = \mp\sin\theta$

Sumas y restas

- $\sin(\alpha \pm \beta) = \sin\alpha\cos\beta \pm \cos\alpha\sin\beta$
- $\cos(\alpha \pm \beta) = \cos\alpha\cos\beta \mp \sin\beta\sin\alpha$
- $\tan(\alpha \pm \beta) = \frac{\tan\alpha \pm \tan\beta}{1 \mp \tan\alpha\tan\beta}$

Ángulos Dobles

- $\sin(2\alpha) = 2\sin\alpha\cos\alpha$
- $\cos(2\alpha) = \cos^2\alpha - \sin^2\alpha$
- $\tan(2\alpha) = \frac{2\tan\alpha}{1-\tan^2\alpha}$