

Trigonometry Identities

$$\sin^2\theta + \cos^2\theta = 1$$

PYTHAGOREAN

$$1 + \tan^2\theta = \sec^2\theta$$

PYTHAGOREAN

$$1 + \cot^2\theta = \operatorname{cosec}^2\theta$$

PYTHAGOREAN

$$\sin 2\theta = 2 \sin\theta \cos\theta$$

DOUBLE ANGLE

$$\cos 2\theta = \cos^2\theta - \sin^2\theta$$

DOUBLE ANGLE

$$\tan 2\theta = 2\tan\theta / (1 - \tan^2\theta)$$

DOUBLE ANGLE

$$\sin(A \pm B) = \sin A \cos B \pm \cos A \sin B$$

SUM & DIFFERENCE

$$\cos(A \pm B) = \cos A \cos B \mp \sin A \sin B$$

SUM & DIFFERENCE