

Basic Trigonometric Identities:

Reciprocal
Identities:

$$1. \sin(\theta) = \frac{1}{\csc(\theta)}$$

$$2. \csc(\theta) = \frac{1}{\sin(\theta)}$$

$$3. \cos(\theta) = \frac{1}{\sec(\theta)}$$

$$4. \sec(\theta) = \frac{1}{\cos(\theta)}$$

$$5. \tan(\theta) = \frac{1}{\cot(\theta)}$$

$$6. \cot(\theta) = \frac{1}{\tan(\theta)}$$

$$7. \tan(\theta) = \frac{\sin(\theta)}{\cos(\theta)}$$

$$8. \cot(\theta) = \frac{\cos(\theta)}{\sin(\theta)}$$

$$9. \sin^2(\theta) + \cos^2(\theta) = 1$$

$$10. \sin(\alpha + \beta) = \sin(\alpha)\cos(\beta) + \cos(\alpha)\sin(\beta)$$

$$11. \cos(\alpha + \beta) = \cos(\alpha)\cos(\beta) - \sin(\alpha)\sin(\beta)$$