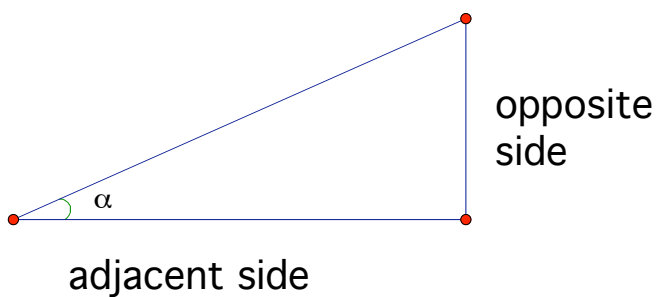


Trigonometric Functions for Acute Angles.



$$\cos\alpha = \frac{\text{adjacent side}}{\text{hypotenuse}}$$

$$\sin\alpha = \frac{\text{opposite side}}{\text{hypotenuse}}$$

$$\tan\alpha = \frac{\text{opposite side}}{\text{adjacent side}} = \frac{\sin\alpha}{\cos\alpha}$$

$$\cot\alpha = \frac{\text{adjacent side}}{\text{opposite side}} = \frac{\cos\alpha}{\sin\alpha}$$

The main identity in trigonometry:

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

Hide Caption

Follows from the Pythagorean theorem.