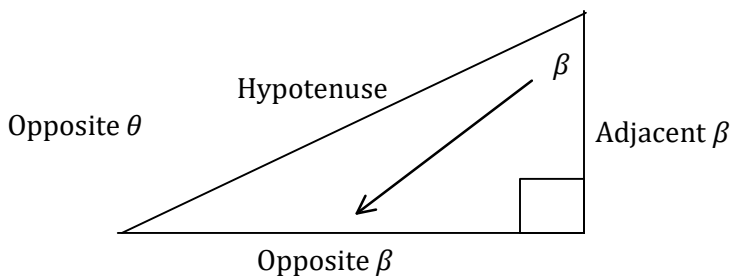
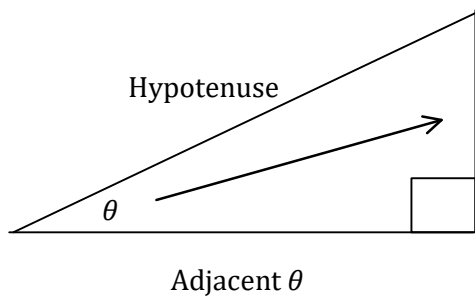


Sides $(\theta \ \& \ \beta \ \text{are Angles})$



Hypotenuse: The Longest Side, Opposite of the 90° Angle.

Adjacent: The side touching angle θ .

Opposite: The side opposite of angle θ .

Label Hyp/Opp/Adj

Sine Ratio

$$\sin\theta = \frac{\text{Opposite}}{\text{Hypotenuse}}$$

$$\sin\theta = \frac{opp}{hyp}$$

$$\sin\theta = \frac{O}{H}$$

1

$$\sin\theta = \frac{3}{5}$$

$$\sin\theta = 0.6$$

Find an Angle

$$\sin\theta = \frac{3}{5}$$

$$\theta = \sin^{-1}(0.6)$$

$$\theta = 36.9^\circ$$

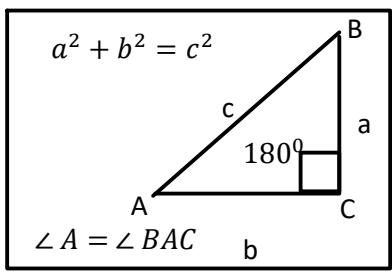
Calculator Degree Mode!
(Not Radians)

Mode Degree

SOH CAH TOA

I	O	H	O	A	H	A	O	A
N	P	Y	S	D	Y	N	P	D
E	P	P		J	P		P	J
	O	O		A	O		O	A
	S	T		C	T		S	C
	I	E		E	E		I	E
	T	N		N	N		T	N
	E	U		T	U		E	T
		S			S			
		E			E			

Choose the part of **SOH CAH TOA** that has 2 pieces of info that we have, and one we want.



Cosine Ratio

$$\cos\theta = \frac{\text{Adjacent}}{\text{Hypotenuse}}$$

$$\cos\theta = \frac{A}{H}$$

$$\cos\theta = \frac{4}{5}$$

$$\cos\theta = 0.8$$

Tangent Ratio

$$\tan\theta = \frac{\text{Opposite}}{\text{Adjacent}}$$

$$\tan\theta = \frac{O}{A}$$

$$\tan\theta = \frac{3}{4}$$

$$\tan\theta = 0.75$$

2

$$\theta = \cos^{-1}(0.8)$$

$$\theta = 36.9^\circ$$

3

$$\theta = \tan^{-1}(0.75)$$

$$\theta = 36.9^\circ$$

Measure the angle with a protractor!