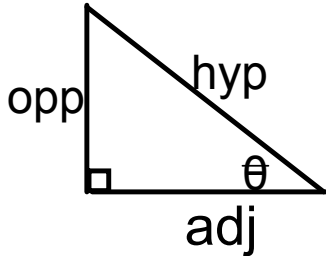


Trigonometry

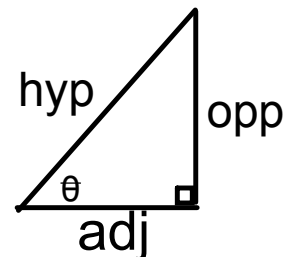
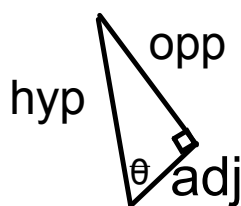
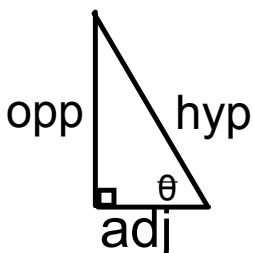
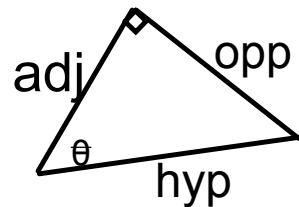
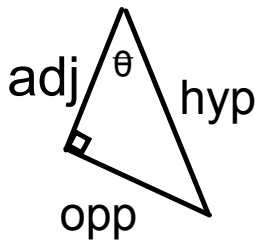
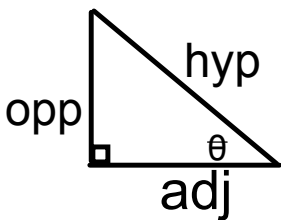
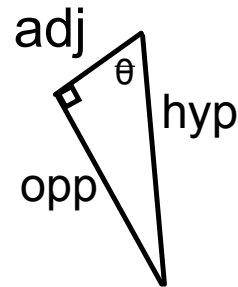
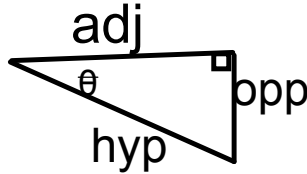
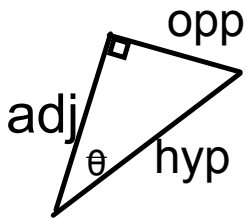
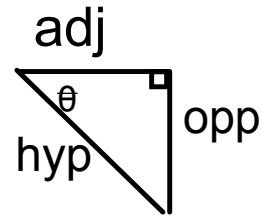
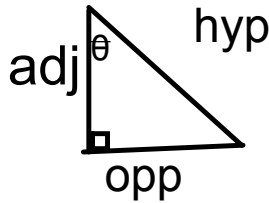
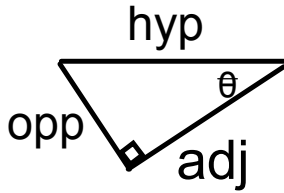
Label the sides of each diagram, using θ as the reference angle.

Example:



opp
hyp
adj

opposite...opp
adjacent...adj
hypotenuse...hyp



Trigonometric Ratios

Sine	Cosine	Tangent
$\sin \theta = \frac{\text{opp}}{\text{hyp}}$	$\cos \theta = \frac{\text{adj}}{\text{hyp}}$	$\tan \theta = \frac{\text{opp}}{\text{adj}}$

sohcahtoa

sohcahtoa

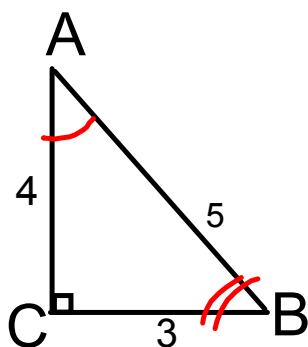
S
 O
 H
 C
 A
 H
 T
 O
 A

sine
 opposite
 hypotenuse
 cosine
 adjacent
 hypotenuse
 tangent
 opposite
 adjacent

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

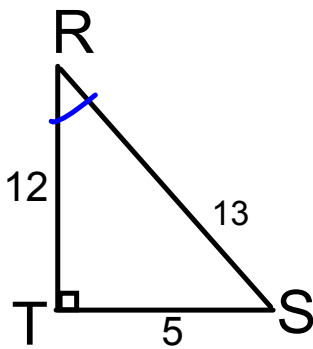
$$\cos = \frac{\text{adj}}{\text{hyp}}$$

$$\tan = \frac{\text{opp}}{\text{adj}}$$



$$\sin \textcircled{A} = \frac{\text{opp}}{\text{hyp}} = \frac{3}{5}$$

$$\cos \underline{B} = \frac{\text{adj}}{\text{hyp}} = \frac{3}{5}$$



Find the angle

$$\tan R = \frac{\text{opp}}{\text{adj}} = \frac{5}{12}$$

$$\angle R = \tan^{-1}\left(\frac{5}{12}\right) \\ = 22.6 = 23^\circ$$

$$\sin R = \frac{\text{opp}}{\text{hyp}} = \frac{5}{13}$$

$$\angle R = \sin^{-1}\left(\frac{5}{13}\right) = 23^\circ$$