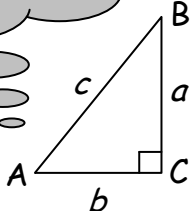


# Trigonometry

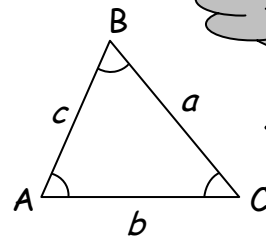
$\angle A + \angle B + \angle C = 180^\circ$   
 $\angle A = 90^\circ - \angle B$



Right Triangles

Pythagorean Theorem  
 $c^2 = a^2 + b^2$

$\angle A + \angle B + \angle C = 180^\circ$



Non-Right Triangles

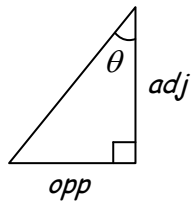
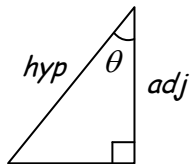
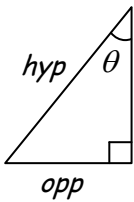
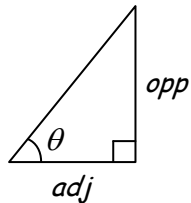
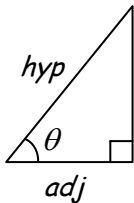
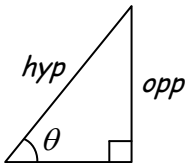
Primary Trigonometric Ratios

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

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

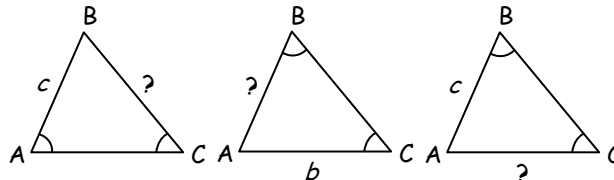
$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

**SOH**                      **CAH**                      **TOA**



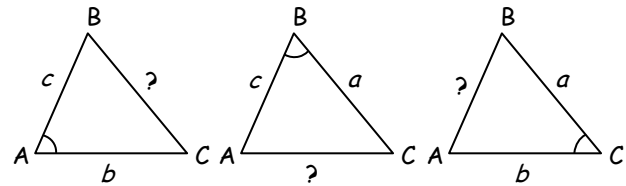
Sine Law

Cosine Law

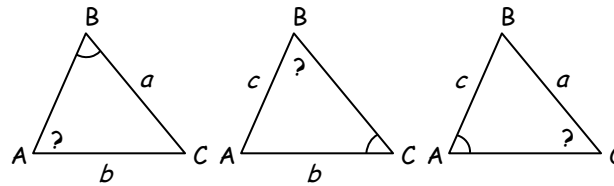


$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$



$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$



$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

