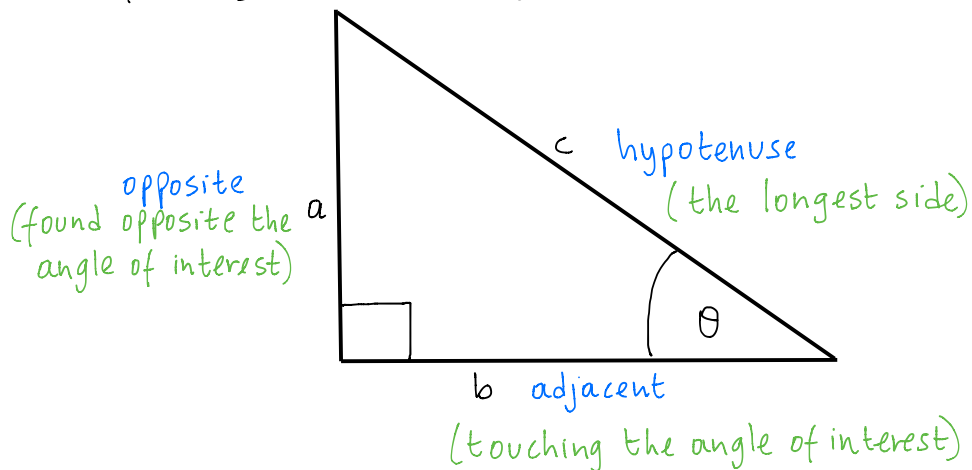


C2 - Chapter 6 - Radian measure and its applications - Summary

* Recall from your IGCSE days:



Pythagoras' theorem: $a^2 + b^2 = c^2$

$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

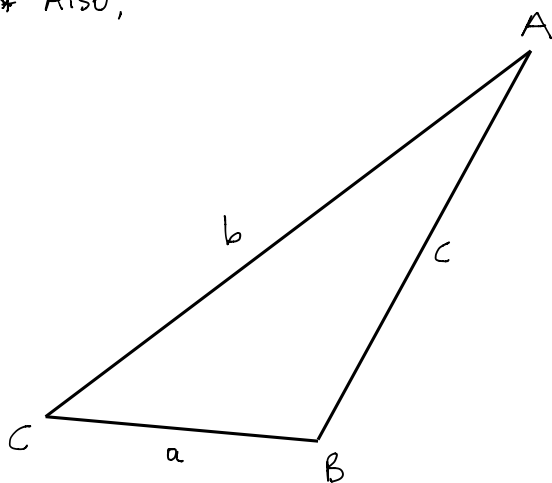
$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$$

SOH CAH TOA OR

Some Old Horses
Can Always Hide
Their Old Ages

* Also,



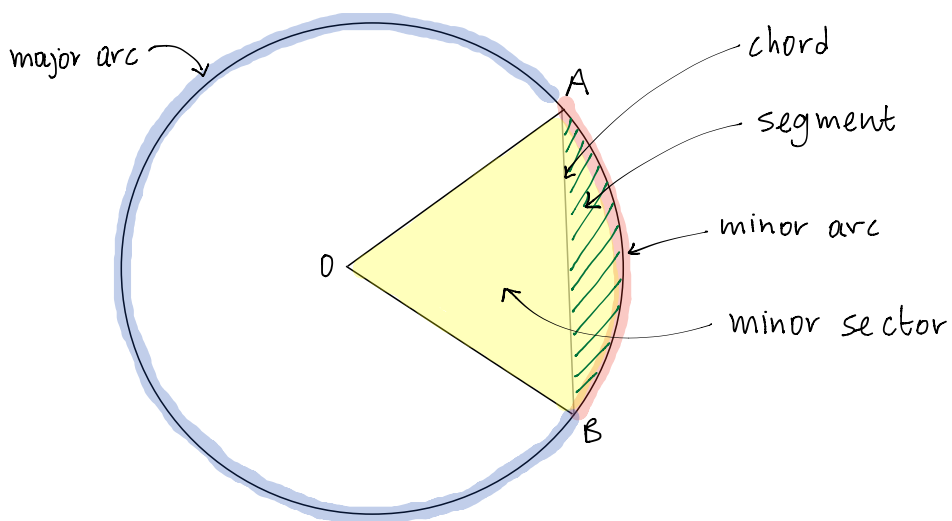
$$\text{Sine rule: } \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

$$\text{Cosine rule: } a^2 = b^2 + c^2 - 2bc \cos A$$

$$\text{Area of triangle} = \frac{1}{2} ab \sin C$$

$$* \pi^c = 180^\circ$$

* Circle terminology



* Length of arc = $r\theta$

* Area of sector = $\frac{1}{2}r^2\theta$

* Area of segment = $\frac{1}{2}r^2(\theta - \sin\theta)$

} provided θ is measured in radians