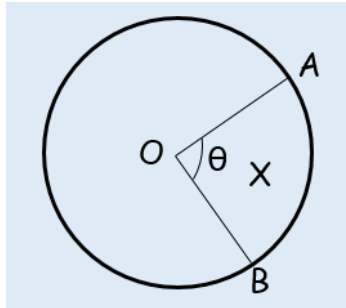
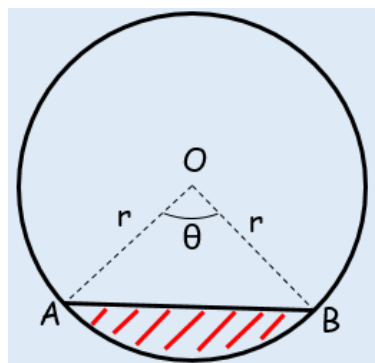


5D Area of Sectors & Segments

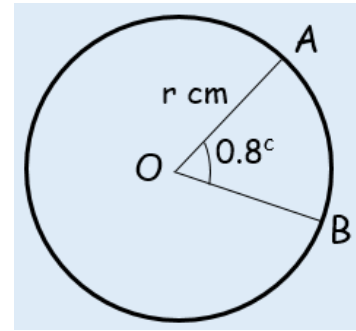
Sectors



Segments

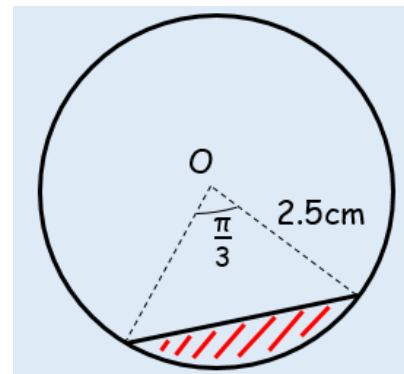


1. In the diagram, the area of the minor sector AOB is 28.9cm^2 . Given that angle AOB is 0.8 rad, calculate the value of r .



2. A plot of land is in the shape of a sector of a circle of radius 55m . The length of fencing that is needed to enclose the land is 176m . Calculate the area of the plot of land.

3. Calculate the Area of the segment shown in the diagram below.



4. In the diagram AB is the diameter of a circle of radius r cm, and angle $BOC = \theta$ radians. Given that the Area of triangle AOC is 3 times that of the shaded segment, show that $3\theta - 4\sin\theta = 0$.

