**5D Area of Sectors & Segments**

Sectors



Segments



1. In the diagram, the area of the minor sector AOB is 28.9cm2. Given that angle AOB is 0.8 rad, calculate the value of r.



1. 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.
2. Calculate the Area of the segment shown in the diagram below.



1. In the diagram AB is the diameter of a circle of radius r cm, and angle BOC = θ radians. Given that the Area of triangle AOC is 3 times that of the shaded segment, show that 3θ –4sinθ = 0.

