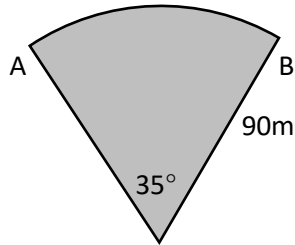


National 5 Homework

Geometric Skills

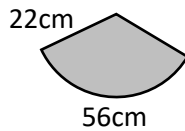
Arcs and Sectors

1. In athletics, the hammer throw has a landing area in the shape of a sector with dimensions shown.



- a) Calculate the area in which the hammer must land.
- b) Calculate the length of the outer arc AB.

2. Glass panels are to be manufactured in the shape of sectors with dimensions shown.

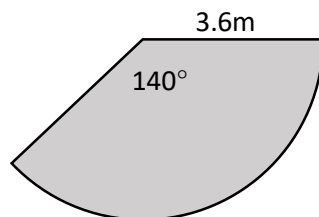


Calculate the angle at the centre of each panel.

3. A wifi symbol is displayed outside a mobile phone shop. Its radius is 23cm and the area is 485cm^2 . Calculate the angle at the base of the symbol.



4. A security light sweeps around an angle of 140° and reaches a distance of 3.6 metres. Calculate the area the light can detect.



5. Decorative panes of glass in the shape of sectors are used in stained glass designs. Each square glass panel measures 38cm . If the reflex angle at the centre of the decorative pane is 255° , calculate the area of the glass panel **not** covered.

