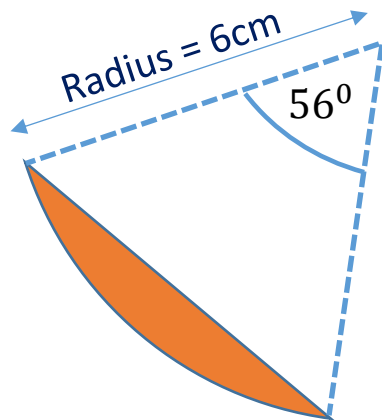
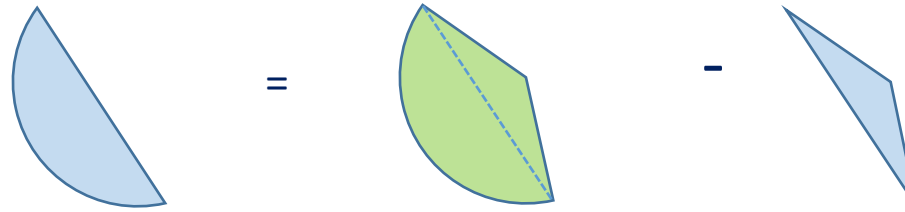


## Area of a Segment

Area of a segment = Area of a sector – Area of Triangle



$$\begin{aligned}\text{Area of a sector} &= \frac{\text{angle}}{360^\circ} \times \pi \times \text{radius}^2 \\ &= \frac{56^\circ}{360^\circ} \times \pi \times 6^2 \\ &= 17.59 \text{ cm}^2 \text{ (2 d.p.)}\end{aligned}$$

$$\begin{aligned}\text{Area of a triangle} &= \frac{1}{2} ab \sin C \\ &= \frac{1}{2} \times 6 \times 6 \times \sin 56^\circ \\ &= 14.92 \text{ cm}^2 \text{ (2 d.p.)}\end{aligned}$$

**Area of Segment = Area of Sector – Area of triangle**

$$= 17.59 - 14.92 = 2.67 \text{ cm}^2 \text{ (2 d.p.)}$$

