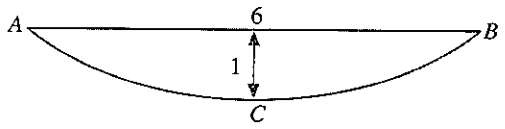
3.



The diagram shows a segment ACB of a circle. AB = 6 cm and the lowest point C is 1 cm from AB.

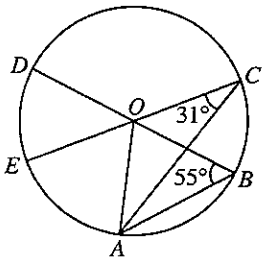
(a) Copy the diagram and find the centre of the circle by construction.

(b) Find the radius of the circle.

4. In the diagram, BD and CE are diameters of the circle with centre O. $\angle ABD = 55°$ and $\angle ACE = 31°$. Find

(a) $\angle AOE$,

(b) $\angle DOE$.

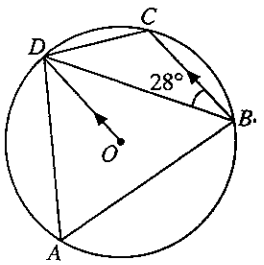


5. In the diagram, O is the centre of the circle, OD // BC and $\angle CBD = 28°$. Find

(a) $\angle ODB$,

(b) $\angle BAD$,

(c) $\angle BCD$.

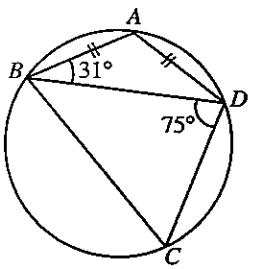


6. In the diagram, $AB = AD$, $\angle ABD = 31°$ and $\angle BDC = 75°$. Find

(a) $\angle BAD$,

(b) $\angle BCD$,

(c) $\angle ABC$.



7. In the diagram, O is the centre of the circle and $\angle OBD = 27°$. Find

(a) $\angle BAD$,

(b) $\angle BCD$.