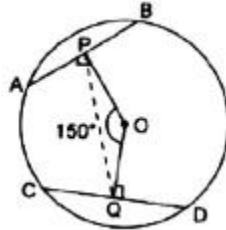
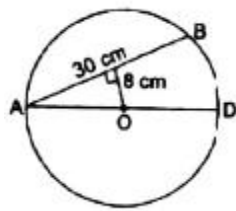


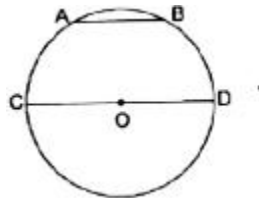
1. In the figure, AB and CD are two equal chords of the circle with center O. OP and OQ are perpendiculars on chords AB and CD respectively. If $\angle POQ = 150^\circ$, then what is $\angle APQ$?



2. AD is the diameter of a circle and AB is a chord. If AB = 30 cm and its perpendicular distance from the center of the circle is 8 cm, then what is the length of the diameter AD?



3. A circle of 30 cm diameter has a 24 cm chord. What is the distance of the chord from the center?
4. A chord AB of a circle with center O is 10 cm. If the chord is 12 cm away from the center, then what is the radius of the circle?
5. If the diameter AD of a circle is 34 cm and the length of a chord AB is 30 cm. What is the distance of AB from the center?
6. What is the length of a chord which is at a distance of 4 cm from the center of a circle of radius 5 cm?
7. If the radius of a circle is 13 cm and the length of its chord is 10 cm then what is the distance of the chord from the center?
8. If the distance of 10 cm long chord from the center of the circle is 12 cm then what is the diameter of the circle?
9. In the figure, AB and CD are two chords of a circle with center O, such that C, O, D are collinear and $AB = \frac{1}{3}CD$. If AB = 3 cm, then what is the radius of the circle?



10. Two circles having radii 5 cm and 3 cm intersect each other at two distinct points. If the distance between their centers is 4 cm, then what is the length of the common chord?