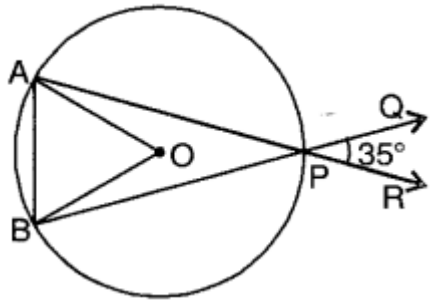
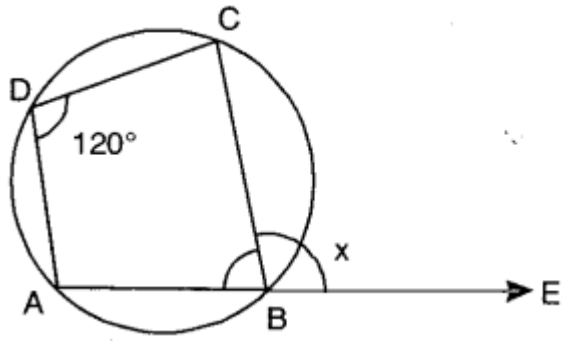
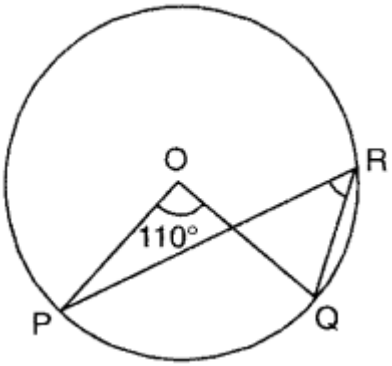
1. In the given figure, O is the centre of the circle with chords AP and BP being produced to R and Q respectively. If ∠QPR = 35°, find the measure of ∠AOB. [CBSE-14-17DIG1U]



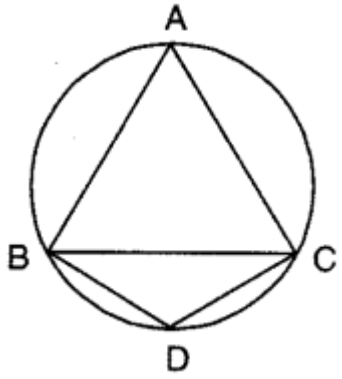
2. In the given figure, what is the measure of angle x ?



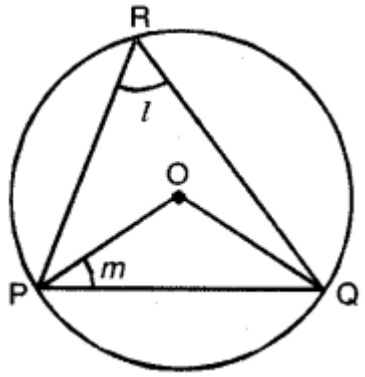
3. In the given figure, if O is the centre of circle and ∠POQ = 110°, then find ∠PRQ



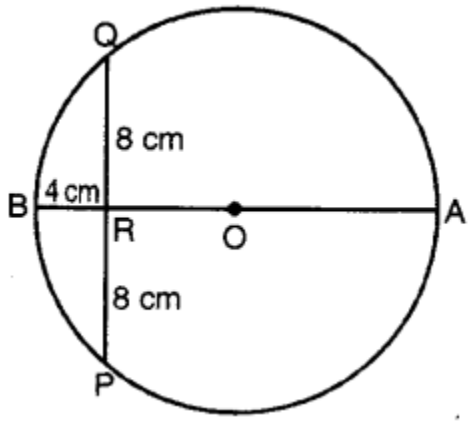
4. In the given figure, ΔABC is an equilateral triangle and ABDC is a cyclic quadrilateral, then find the measure of ∠BDC.



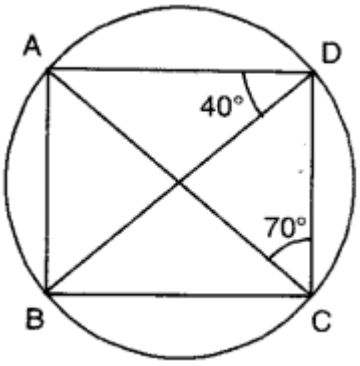
5. In the given figure, O is the centre of the circle. PQ is a chord of the circle and R is any point on the circle. If ∠PRQ = l and ∠OPQ = m, then find l + m.



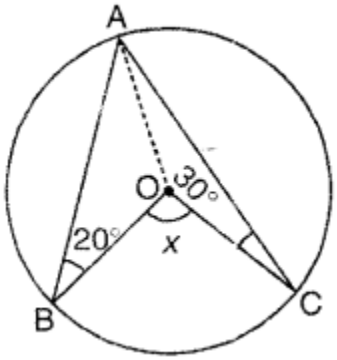
6. The given figure shows a circle with centre O in which a diameter AB bisects the chord PQ at the point R. If PR = RQ = 8 cm and RB = 4 cm, then find the radius of the circle.



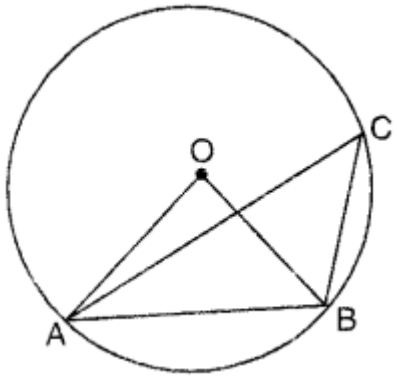
7. In the given figure, ABCD is a cyclic quadrilateral such that ∠ADB= 40° and ∠DCA = 70°, then find the measure of ∠DAB .



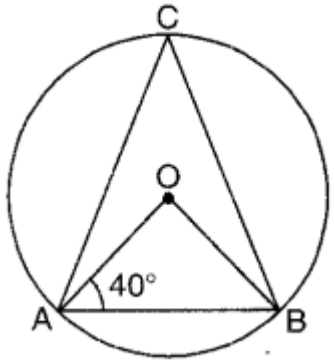
8. In the figure, 'O' is the centre of the circle, ∠ABO= 20° and ∠ACO= 30°, where A, B, C are points on the circle. What is the value of x ?



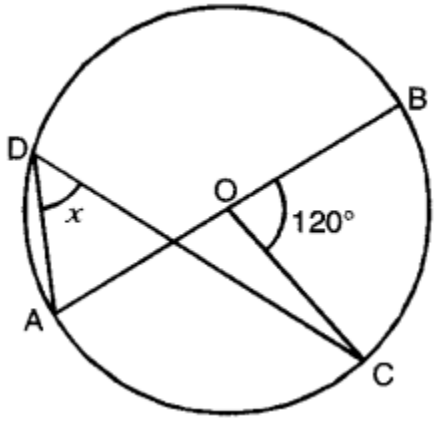
9. In the given figure, if O is the centre of circle. Chord AB is equal to radius of the circle, then find ∠ACB.



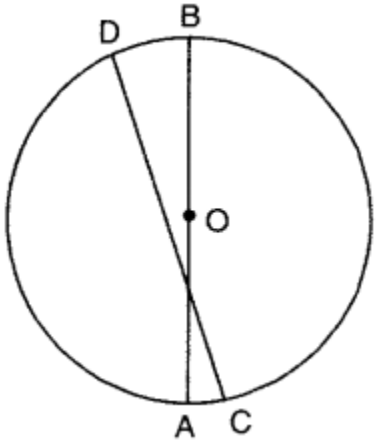
10. In the given figure, if ∠OAB = 40°, then find the measure of ∠ACB. [NCERT Exemplar Problem]



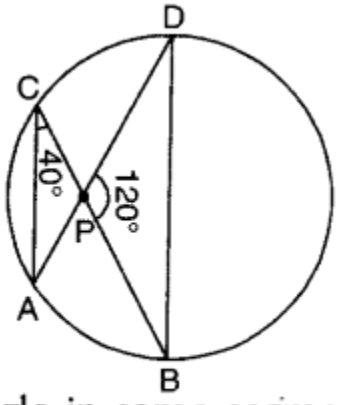
11. In the given figure, O is the centre of the circle. If∠BOC= 120°, then find the value of x.



12. In the given figure, O is the centre of the circle, then compare the chords.

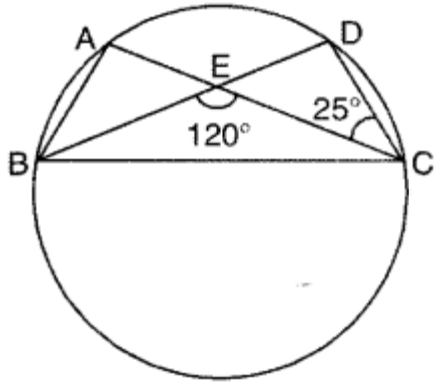


13. In the given figure, ∠ACP = 40° and ∠BPD = 120°, then find ∠CBD .



[angle in same segment]

14. In the given figure, if ∠SEC = 120°, ∠DCE = 25°, then find ∠BAC.



15. AD is a diameter of a circle and AB is a chord. If AD = 34 cm, AB = 30 cm, then find the distance of AB from the centre of the circle. [CBSE March 2012]