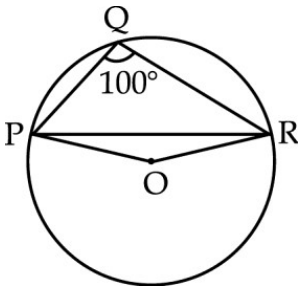
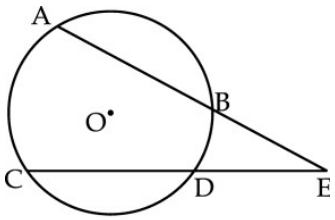
Class 09 Chapter – Circle CBSE Test Paper – 04

1. Q. In the figure, <PQR = 100^0 where P, Q and R are points on circle with centre O. Find <OPR.

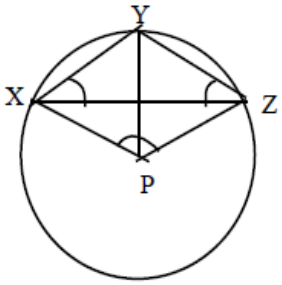


2. Q. AC and BD are chords of a circle which bisect each other. Prove that: (i) AC and BD are diameters (ii) ABCD is a rectangle.

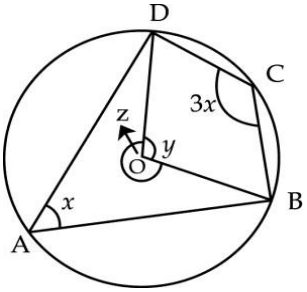
3. Q. Two equal chords AB and CD of a circle with centre O, when produced meet at a point E as shown in figure. Show that BE = DE and AE = CE.



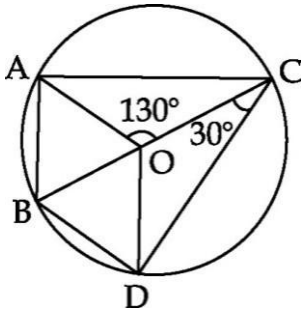
4. Q. In the figure, P is the centre of a circle. Prove that 2(<XZY + <YXZ) = <XPZ



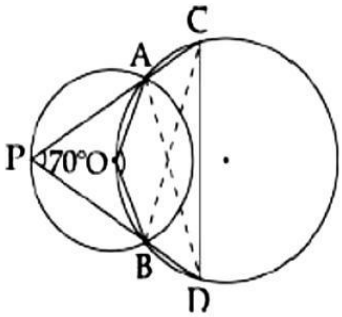
5. Q. In the given figure, O is the centre of the circle. Find the values of x, y, z.



6. Q. In the given figure, O is the centre of the circle. Find <BAO, <AOB, <BOD, <ODB, if < AOC = 130^0 and <OCD = 30^0.



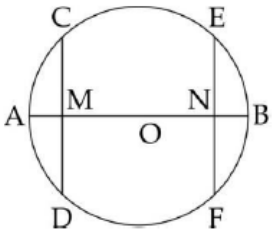
7. Q. In the given figure, two circles intersect each other at A and B. The centre of the smaller circle is O and lies on the larger circle. If PAC and PBD are straight lines and <APB = 70°, find <AOB, <ACB and < ADB.

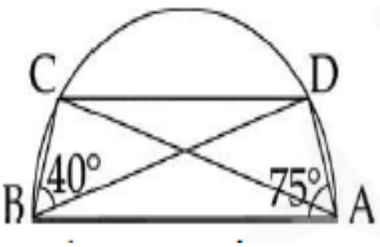


8.Q. A chord of a circle is equal to the radius of circle. Find the angle subtended by it at any point on minor arc and also at the point on major arc.

9.Q. A circle has radius √2 cm. It is divided into two segments by a chord of length 2 cm. Prove that angle subtended by the chord at a point in major segment is 45^0

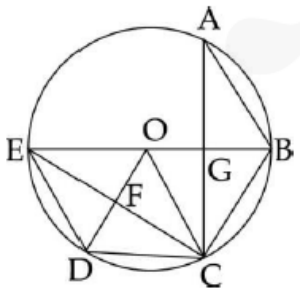
10. Q. If a diameter AB of a circle with centre O bisects each of the two chords CD and EF as shown in the figure given below . Prove that the two chords are parallel.



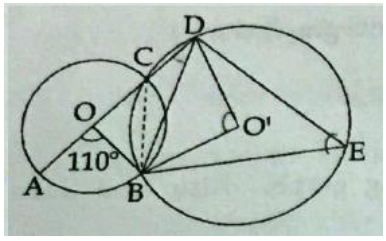


11. Q. In the above given figure, C and D are points on the semicircle with AB as diameter. If < BAD = 75 and < DBC = 40, find <ABD, < ACB and <BDC.

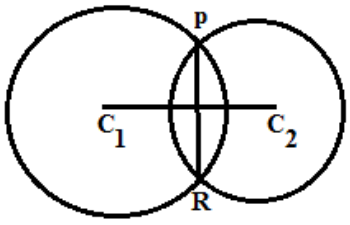
12. Q. In the given figure, chords AB, BC and CD are equal and O is the centre of the circle. If < ABC = 120, find the measure of (i) <BAC (ii) < BEC (iii) <COD (iv) < BOD



12. Q. In given figure O and O' are centre of two circles intersect each other at B and C. If AOCD is a straight line and <AOB =110 then find <BED and <BOD



13. Q. In fig. two circles of radii x cm and y cm (x>y) intersect at two points P and Q resp. If the distance "d" between the centre of two circle is given by $d^2 = x^2 - y^2$. prove that the length of the common chord is 2y cm



14. Q. In fig. ABCD is a IIgm, A circle through A,B,C intersect CD produced at E. Prove that AD = AE