



INDIAN SCHOOL NIZWA - WORKSHEET

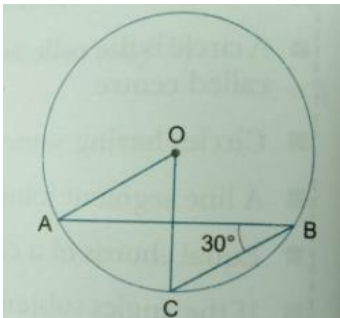
9. CIRCLES

Name: _____

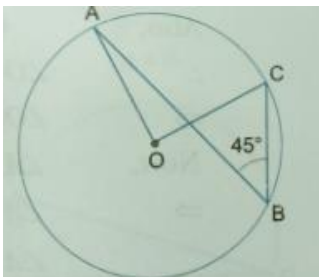
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Class: IX Sec:

1. A Circle is the collection of all those points in a plane which are _____ from a fixed point in the plane called _____.
2. What are concentric circles?
3. A perpendicular drawn from the centre of the circle to a chord _____ the chord.
4. Chords equidistant from the centre of a circles are _____ in length.
5. Angles in the same segment of a circle are _____.
6. The angle in a semi circle is _____.
7. If all vertices of a quadrilateral lie on a circle, it is called a _____ quadrilateral.
8. The sum of either pair of opposite angles of a cyclic quadrilateral is _____.
9. In a cyclic quadrilateral PQRS. If $\angle QRS = 110^\circ$, then find $\angle SPQ$.
10. If a circle is divided into 8 equal parts, find the angle subtended by each arc at the centre.
11. In the given figure $\angle ABC = 30^\circ$, then find $\angle AOC$.



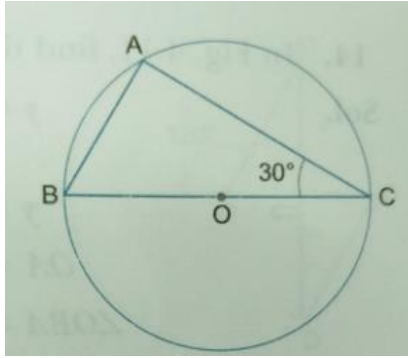
12. In the given figure $\angle ABC = 45^\circ$, prove that $OA \perp OC$.



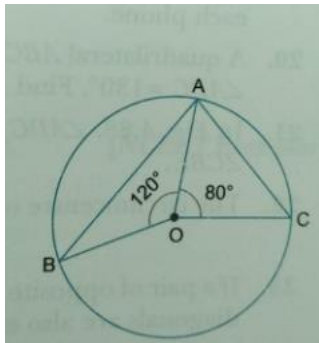
13. The angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
14. Prove that the quadrilateral formed (if possible) by the internal angle bisectors of any quadrilateral is cyclic.
15. In the given figure O is the centre of the circle. If $\angle ACB = 30^\circ$, then find $\angle ABC$.



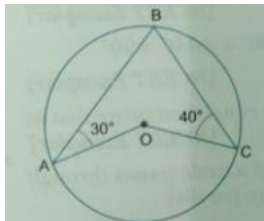
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16. Find $\angle BAC$.



17. Find $\angle AOC$.



18. AB is a diameter of the circle, CD is a chord equal to the radius of the circle. AC and BD when extended intersect at a point E. Prove that $\angle AEB = 60^\circ$

