CIRCLES

ANGLE SUBTENDED BY AN ARC OF A CIRCLE

EXERCISE

- **Q.1** 0 is the centre of the circle. If $\angle BOA = 90^{\circ}$ and $\angle COA = 110^{\circ}$, find $\angle BAC$.
- **Q.2** O is the centre of the circle. If $\angle BAC = 50^\circ$, find $\angle OBC$.
- **Q.3** Find the value of x from the given figure, in which 0 is the centre of the circle.



Q.4 P is the centre of the circle. Prove that $\angle XPZ = 2 (\angle XZY + \angle YXZ)$.



- **Q.5** In fig. ABC is a triangle in which $\angle BAC = 30^{\circ}$. Show that BC is the radius of the circumcircle of $\triangle ABC$, whose centre is 0.
- **Q.6** 0 is the centre of the circle. If \angle BOA = 90° and \angle COA = 110°, find \angle BAC.
- **Q.7** In figure, if $\widehat{AB} \cong \widehat{CD}$, prove that $\angle A = \angle B$.



CLASS 9

Q.8 In figure calculate the measure of $\angle AOC$.



ANSWER KEY

- **1.** ∠BAC = 80°
- **2.** $\angle OBC = 40^{\circ}$.
- **3.** x = 50°.
- **6.** $\angle BAC = 80^{\circ}$
- **8.** 70^o