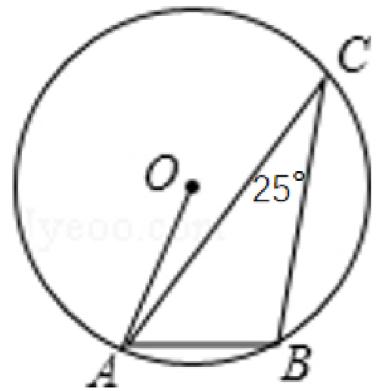


As shown in the figure, then the degree of angle BAO
is ()
Choices: A:50° B:55° C:60° D:65°



Answer:
D

Ours

- ✓ Given that $\angle ACB = 25^\circ$, we can use the property of angles subtended by the same arc to find $\angle AOB$.
- ✓ Step 1: Since $\angle ACB = 25^\circ$, $\angle AOB = 2 \times \angle ACB = 2 \times 25^\circ = 50^\circ$.
- ✓ Step 2: In triangle OAB, $OA = OB$ because they are radii of the circle. Therefore, $\angle OAB = \angle OBA$.
- ✓ Step 3: The sum of angles in a triangle is 180° . So, $\angle OAB + \angle OBA + \angle AOB = 180^\circ$.
- ✓ Step 4: Substituting the known values, we get $2\angle OAB + 50^\circ = 180^\circ$.
- ✓ Step 5: Solving for $\angle BAO$, we get $\angle BAO = (180^\circ - 50^\circ) / 2 = 65^\circ$. Therefore, the degree of $\angle BAO$ is 65° . The answer is D.

ChatGPT-4o

- ✗ We are given a circle with center O, and triangle ABC inscribed in the circle. The $\angle BCO = 25^\circ$. We are to find the $\angle BAO$.
- ✗ Since O is the center of the circle and C lies on the circle, segments OC and OB are radii of the circle. Therefore, triangle BOC is isosceles with $OB = OC$. In triangle BOC, two sides are equal, and the angle between them is at vertex C.
- ✗ In triangle BOC, $\angle BCO = 25^\circ$. Let $\angle OBC = 25^\circ$, since triangle BOC is isosceles. Then, $\angle BCO = 180^\circ - 25^\circ - 25^\circ = 130^\circ$.
- ✓ Now consider triangle BAO. Since O is the center, $OA=OB$, and triangle ABO is isosceles with equal angles at A and B
- ✗ The $\angle AOB$ is the same 130° obtained from the central angle subtended by arc AB. Let $\angle BAO = \angle ABO = x$. Using the triangle angle sum, we have $x + x + 130^\circ = 180^\circ$, so $2x = 50^\circ$, and therefore $x = 25^\circ$. Hence $\angle BAO = 25^\circ$.

Qwen2.5-VL-7B

- ✗ Given: $\angle COB$ is 25° . O is the center of the circle. AOB is a straight line (180°).
- ✓ Since O is the center of the circle, triangle OAB is an isosceles triangle with $OA = OB$ (radii of the circle). Therefore, angles OAB and OBA are equal. Let's denote these angles as x.
- ✗ The sum of the angles in triangle OAB is 180° . $\angle OAB + \angle OBA + \angle AOB = 180^\circ$. Then $x + x + 25^\circ = 180^\circ$. $x = 77.5^\circ$. So, angle BAO is 77.5° . However, this does not match any of the provided choices.