Connect OA and OB. Since PA and PB is a tangent to circle O, we have ∠OAP = ∠OBP = 90°. Also, ∠P = 50°. Therefore, ∠AOB = 360° - 90° - 90° - 50° = 130°. Thus, ∠ACB = 1/2 ∠AOB = 65°. Therefore, the answer is A

Question:

As shown in the figure, given that angle P = 50.0, then the size of angle ACB is?

Choices:

A: 65°   B: 60°   C: 55°   D: 50°

Using the tangent-secant theorem, the angle between a tangent and a chord (∠APB) equals the angle subtended by the chord in the alternate segment (∠ACB). Given ∠APB=50°, it follows that ∠ACB=50°. Thus, the size of ∠ACB is 50°, and the correct option is D.