1. $ABCD$ is a cyclic quadrilateral. If $\angle BAD = (2x + 5)^\circ$ and $\angle BCD = (x + 10)^\circ$ then x is equal to:

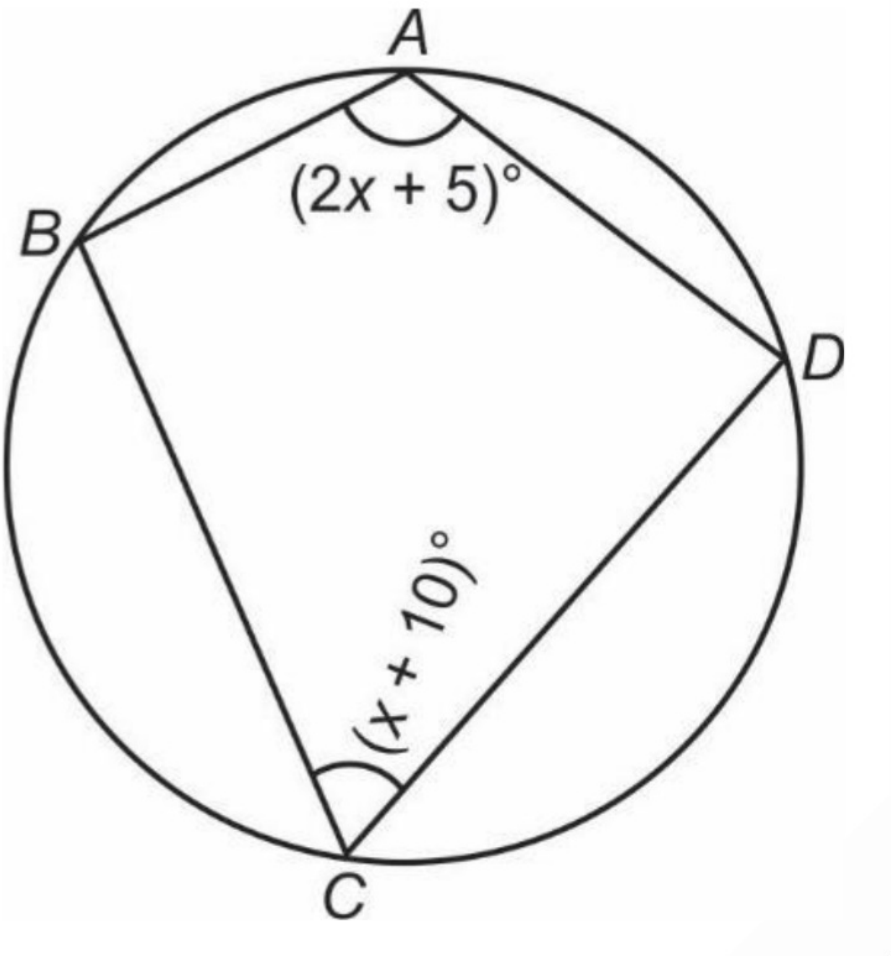

Figure 1:

(a) 65°

(b) 45°

(c) 55°

(d) 5°

2. In the given figure O is the centre of the circle. PQ and PR are tangents and $\angle QPR = 70°$. Calculate:

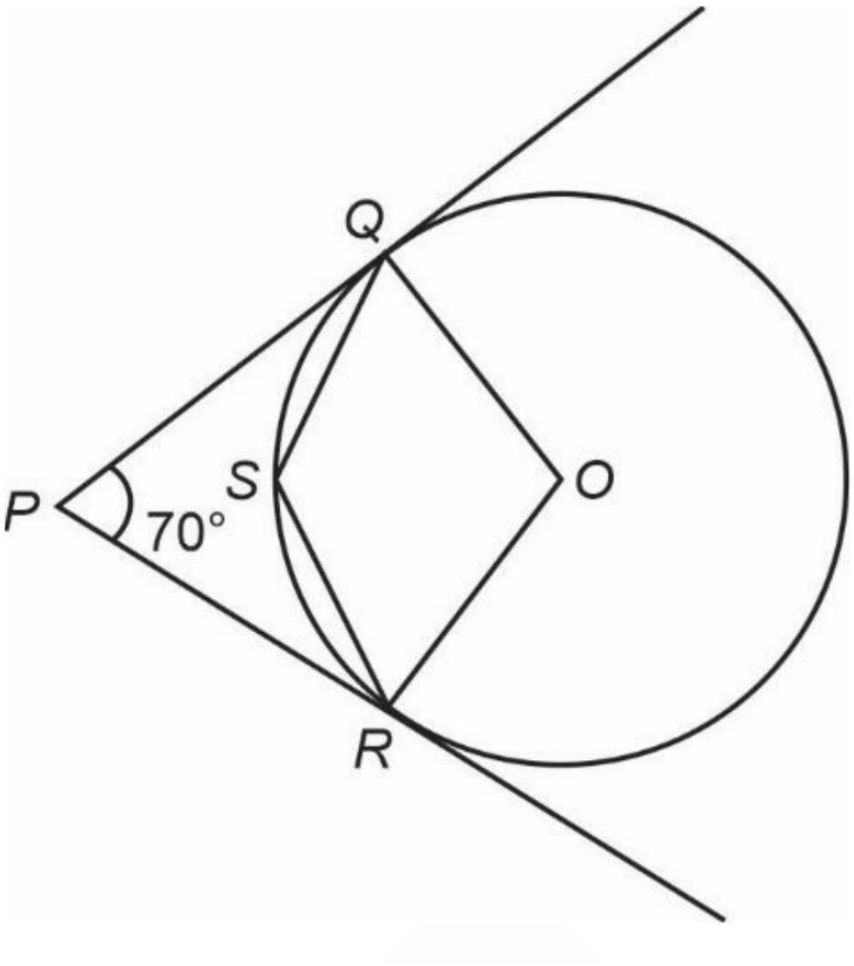

Figure 2:

(a) $\angle QOR$

(b) $\angle QSR$

3. Two chords AB and CD of a circle intersect extenally at E. if $EC = 2cm$, $EA = 3cm$ and $AB = 5cm$, find the length of CD.

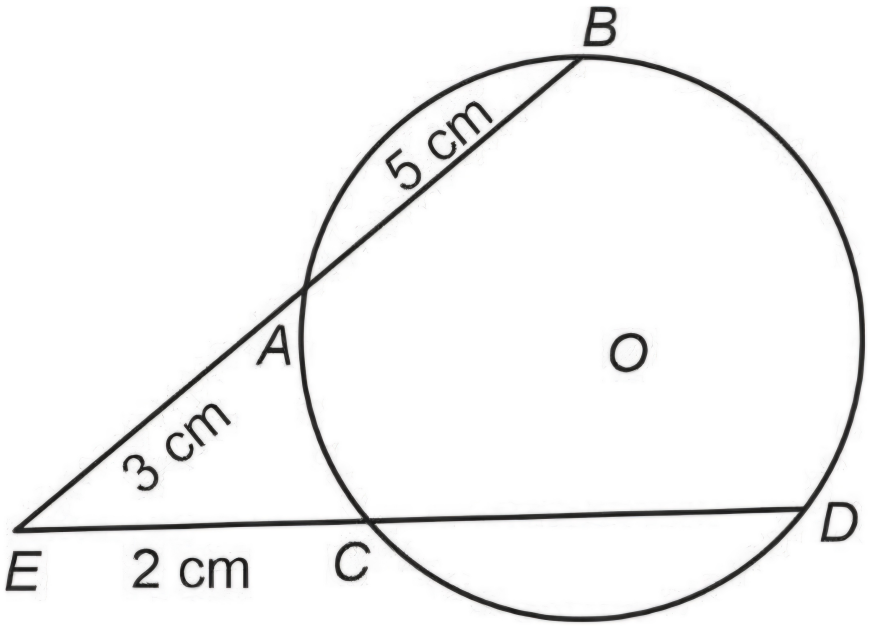

Figure 3:

4. In the given figure A, B, C and D are points on the circle with centre O. Given $\angle ABS = 62°$. Find:

   (a) $\angle ADC$

   (b) $\angle CAB$

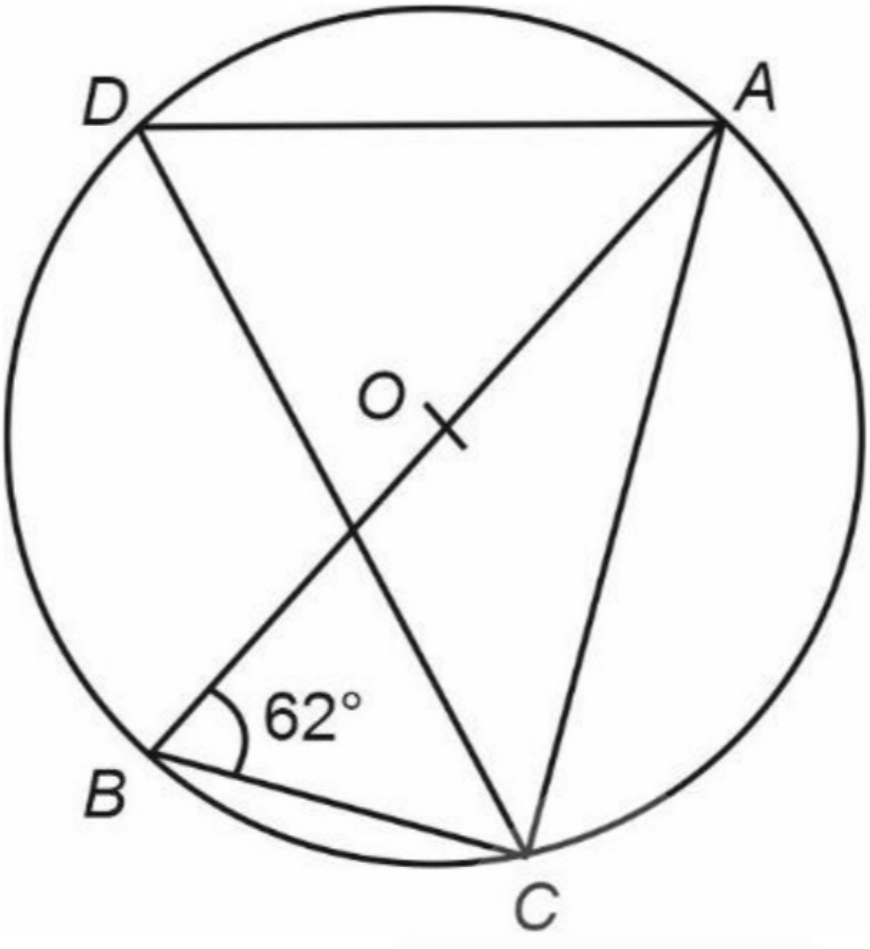

Figure 4: