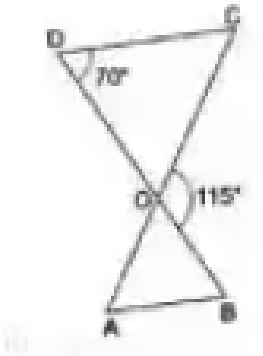
Questions:

Q1. Find the sum of all interior angles of a

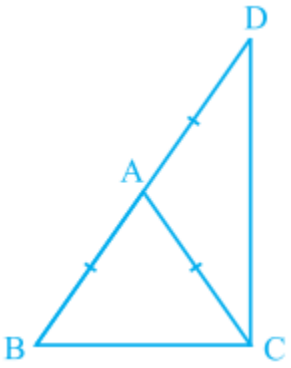
(i) heptagon **(ii)** polygon of 12 sides

Q2. What would be each exterior angle and each interior angle of a regular decagon?

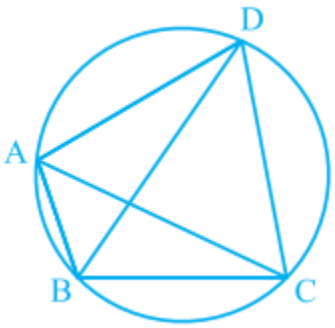
Q3. In the given figure, $\triangle ODC \sim \triangle OBA$, $\angle BOC = 115°$ and $\angle CDO = 70°$. Find $\angle OAB$. (HINT - Angles of similar triangles are equal)



Q4. In the given figure, $\triangle ABC$ is an isosceles triangle with AB=AC. Side BA is produced to D such that AD=AB. Find $\angle BCD$



Q5. In the following figure, ABCD is cyclic Quadrilateral. Given that ∠DBC = 55° and ∠BAC = 45°, find ∠BCD.



Q6. Find the number of diagonals in a polygon having 16 sides.

Answers:

Ans1) (i) 900° (ii)1800°

Ans2) each exterior angle = 36°

each interior angle =144°

Ans3) 45°

Ans4) 90°

Ans5) 80°

Ans6) 104