## HOTS QUESTIONS

1.Exterior angles of a regular polygon is one third of its interior angle.Find number of sides in polygon.

2.In  $\triangle$  ABC ,2∠A= 3∠B= 6∠C, find ∠A ,∠B,and ∠C.

3. Prove that sum of all exterior angles of any polygon is 360

4. In the given figure, bisector of the exterior angles B and C of by producing sides AB and AC of

 $\Delta$  ABC intersect each other at the point O.Prove that

 $\angle BOC = 90^{\circ} - \frac{1}{2} \angle A.$