1. OB is the bisector of ∠AOC, PM ⊥ OA and PN ⊥ OC. Show that ΔMPO ≅ ΔNPO.
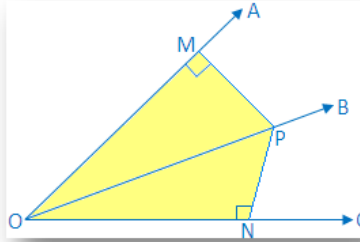
2. ΔPQR ≅ ΔXYZ by ASA congruence condition. Find the value of x and y.
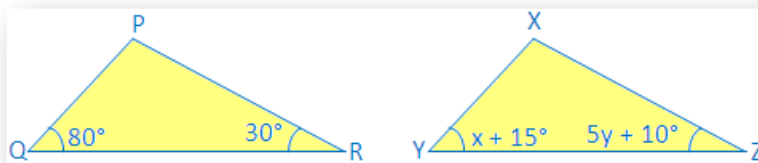
3. ΔXYZ is an equilateral triangle such that XO bisects ∠X. Also, ∠XYO = ∠XZO. Show that ΔYXO ≅ ΔZXO.
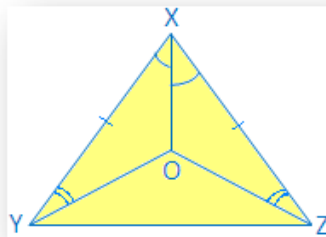
4. LM = NO and LO = MN. Show that Δ LON ≅ Δ NML
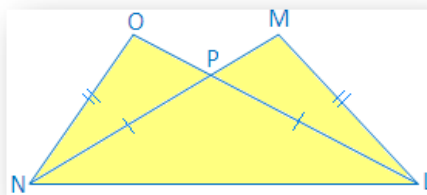
5. In the adjoining figure, apply S-S-S congruence condition and state the result in the symbolic form.
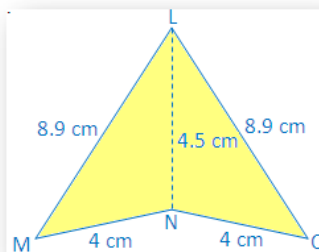
7. By Side Side Side congruence prove that 'Diagonal of the rhombus bisects each other at right angles'.
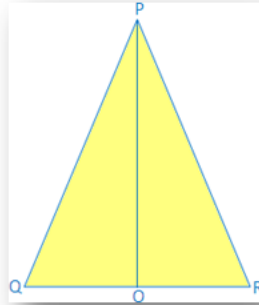
8. In a quadrilateral LMNP, LM = LP and MN = NP.
Prove that LN ⊥ MP and MO = OP [O is the point of intersection of MP and LN]

6. ΔOLM and ΔNML have common base LM, LO = MN and OM = NL. Which of the following are true?
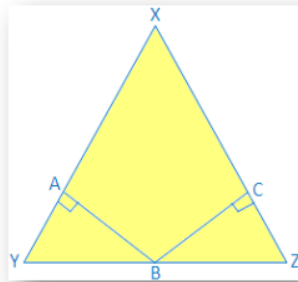
     (i) ΔLMN ≅ ΔLMO
     (ii) ΔLMO ≅ ΔLNM
     (iii) ΔLMO ≅ ΔMLN
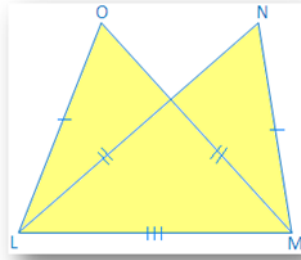
9. ΔPQR is an isosceles triangle such that PQ = PR, prove that the altitude PO from P on QR bisects PQ.

10. ΔXYZ is an isosceles triangle such that XY = XZ, prove that the altitude XO from X on YZ bisects YZ.

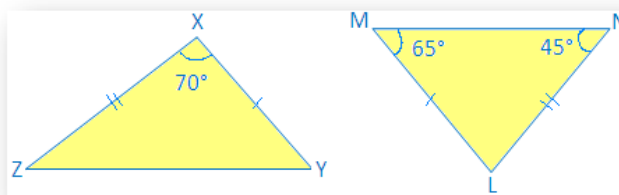11. In the adjoining figure, given that AB = BC, YB = BZ, BA ⊥ XY and BC ⊥ XZ. Prove that XY = XZ

12. In the kite shown, PQ = PS and ∠QPR = ∠SPR.
     (i) Find the third pair of corresponding parts to make Δ PQR ≅ ΔPSR by SAS congruence condition.
     (ii) Is ∠QRP = ∠SRP?
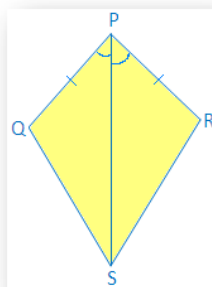
13. Identify the congruent triangle:

14. By using SAS congruency proof that, angles opposite to equal side of an isosceles triangle are equal.

15. Show that bisector of the vertical angle of an isosceles triangle bisects the base at right angle.