CH. 7 : CONGRUENCE OF TRIANGLES

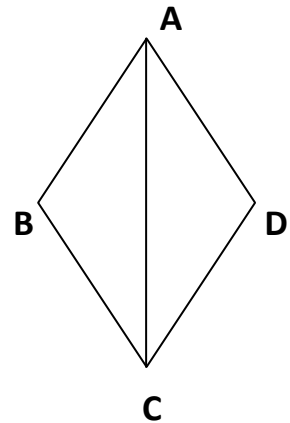1. If Δ ABC ≅ Δ DEF, ∠ A = 100^0 and ∠ B = 45^0 then ∠ F = _____

2. ABCD is a rhombus. AC is a diagonal

   i) Show three pairs of equal parts giving reasons, in Δ ABC and Δ ADC.

   ii) Is Δ ABC ≅ Δ ADC ? Give reason.

   iii) Is ∠ BAC = ∠ DAC? Give reason.

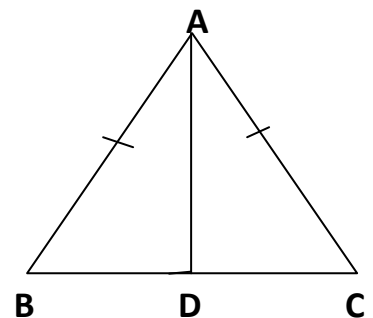

3. ABC is an isosceles triangle with AB = BC and AD ⊥ BC.

   In Δ ABD and Δ ACD

   i) Show three pairs of equal parts giving reasons.

   ii) Is Δ ADB ≅ Δ ADC ? Give reason.

   iii) Is ∠ BAD = ∠CAD ? Give reason.
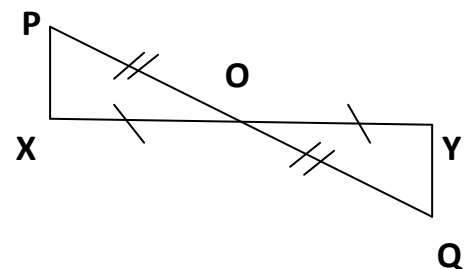

4. In the figure PQ and XY bisect each other at O.

   i) Show three pairs of equal parts in Δ POX and Δ QOY

   ii) Is Δ POX ≅ Δ QOY Give reasons

   iii) Is ∠ X = ∠ Y ? Give reasons

5. In the figure, O is the midpoint of BC and ∠B = 90⁰, ∠C = 90⁰
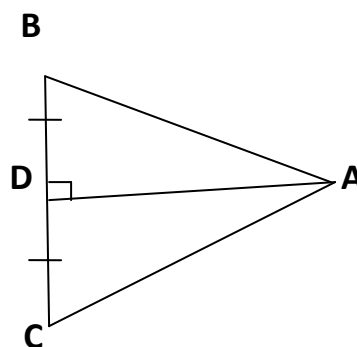
    By using ASA Congruence rule

    Show that Δ AOB ≅ Δ DOC
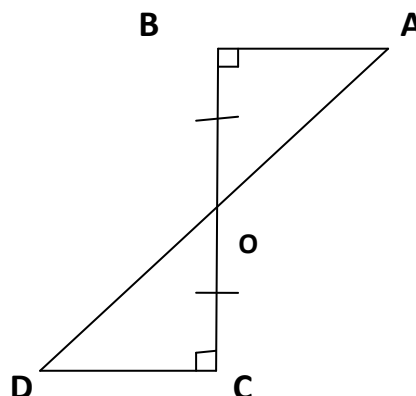
6. ABCD is a rectangle. AC is a diagonal (Draw a figure). By using

    SSS Congruence rule Show that Δ ABC ≅ Δ CDA

7. In the figure AD ⊥ BC . D is the midpoint of BC
    Using SAS Congruence rule show that

    Δ ABD ≅ Δ ACD

    Is AB = AC ? Why?

8. Given the figure,

    Prove that Δ ABC ≅ Δ RQP

    If ∠A= 30⁰, ∠R= 30⁰