

2018

Date: -

HOME ASSIGNMENT

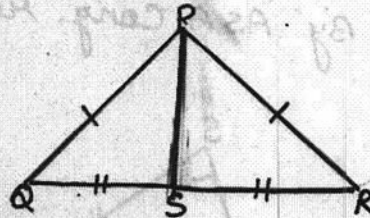
CLASS-VII

Ch-7 Congruence of Triangles

Q1 $\triangle POR$ is isosceles with $\overline{PO} = \overline{PR}$; S is the mid point of \overline{OR}

(a) Is $\triangle POS \cong \triangle PRS$

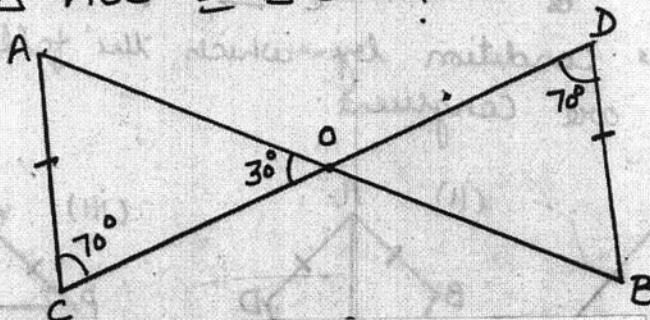
(b) Is $\angle O = \angle R$?



[Ans (i) By SSS Cong. $\triangle POS \cong \triangle PRS$

(ii) yes, corresponding parts will be Congruent]

Q2(a) Use ASA Congruence rule and conclude that $\triangle AOC \cong \triangle BOD$?



[Ans \rightarrow By ASA Cong. rule $\triangle AOC \cong \triangle BOD$]

(b) $\triangle DEF \cong \triangle BCA$, write the parts of $\triangle BCA$ that correspond to (i) $\angle F$ (ii) \overline{DE} (iii) $\angle D$ (iv) \overline{EF} (v) \overline{DF}

[Ans (i) $\angle A$ (ii) \overline{BC} (iii) $\angle B$ (iv) \overline{CA} (v) \overline{BA}]

Q3 In the given figure \rightarrow

$AB = AD, BC = DC$

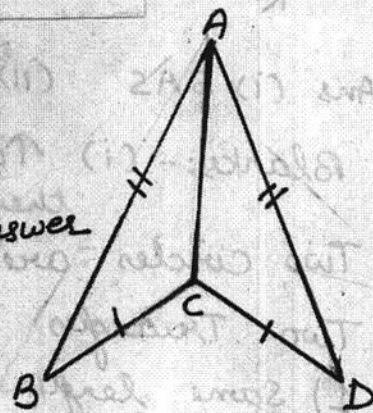
(a) Is $\triangle ABC \cong \triangle ADC$?

If yes, give reason for your answer

[Ans \rightarrow By SSS Cong. rule]

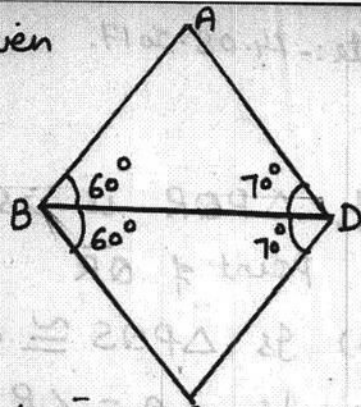
(b) If $\angle BAC = 32^\circ$ find $\angle BAD$

[Ans $\angle BAD = 64^\circ$]

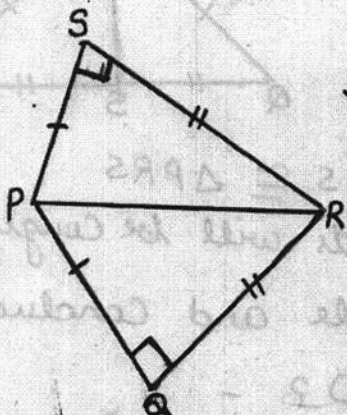


Q4 Is $\triangle ABD \cong \triangle CBD$ in the given figure? Give reason for your answer.

[Ans By ASA Cong. rule]



Q5



In the given figure C
 $PS \perp SR$ and $PQ \perp QR$
 Also $SR = QR$ Show that

(i) $\triangle PSR \cong \triangle PQR$

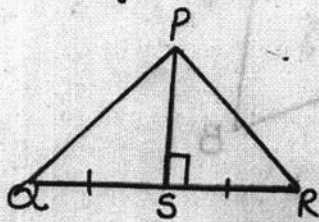
(ii) $PQ = PS$

[Ans By RHS Cong. rule]

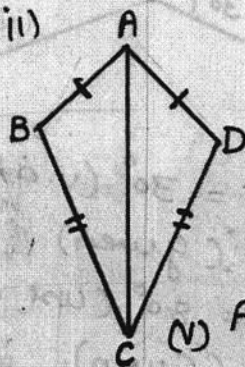
Q6

State the condition by which the following pairs of triangles are congruent.

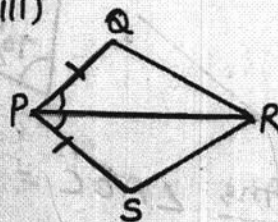
(i)



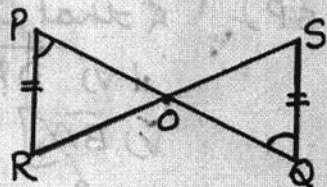
(ii)



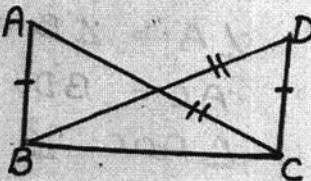
(iii)



(iv)



(v)



[Ans (i) SAS (ii) SSS (iii) SAS (iv) SAS (v) SSS]

Q7 Blanks:- (i) Two line segments are congruent if they have _____

2) Two circles are congruent if they have _____

3) Two Triangles are congruent if they have _____

[Ans 1) Same length 2) Same radii 3) All parts equal]