CLASS VII

WORKSHEET NO.8

SUBJECT: MATHEMATICS

Chapter 7 : Congruence of triangles

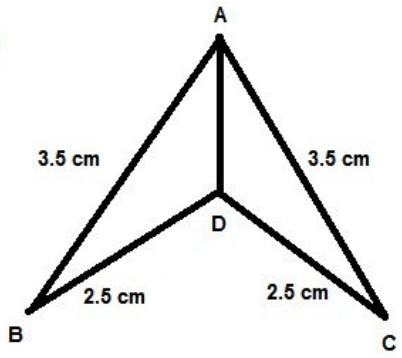
Q.1. If triangle ABC and triangle DEF are congruent under the correspondence: ABC ←→ FED

Write the parts of triangle ABC that corresponds to:

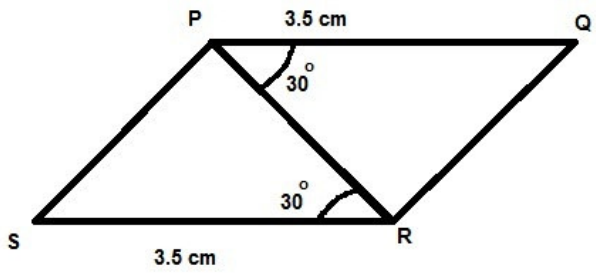
a) DE b) Angle E c) FD

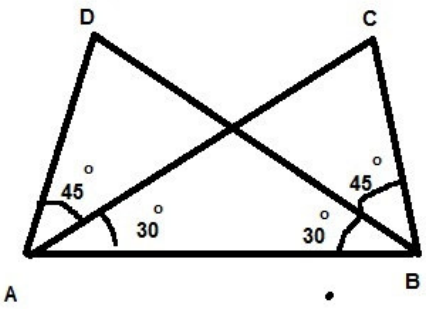
Q.2. Which congruence criterion will you use in the following. Write the congruence in symbolic form:

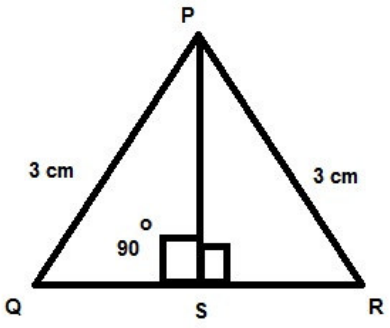
a)



b)





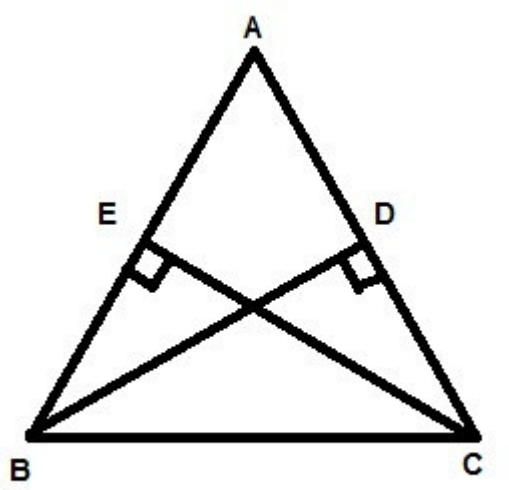


Q.3. In the given figure BD and CE are the altitudes of triangle ABC such that BD = CE

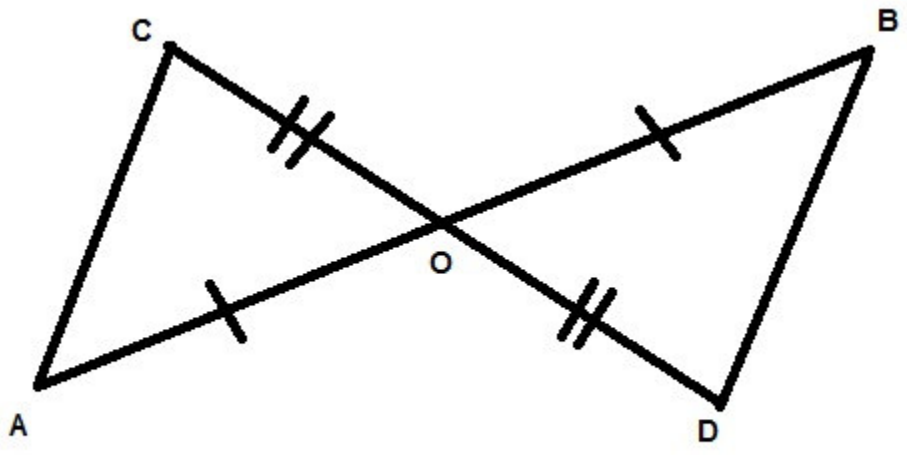
a) Prove that $\Delta CBD \cong \Delta BCE$

b) Is angle DCB = angle EBC

Give reasons



Q.4. In the given figure AB and CD bisect each other at O. Prove that the $\Delta AOC \cong \Delta BOD$



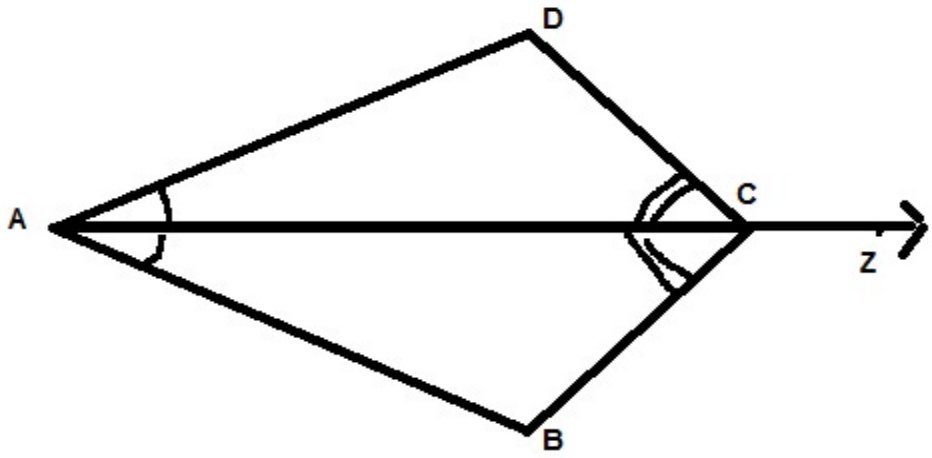
Q.5. In the given figure ray AZ bisects angle BAD and angle DCB:

a) Prove that the $\Delta BAC \cong \Delta DAC$

b) Is AB = AD?

c) Is CD = CB?

Give reasons

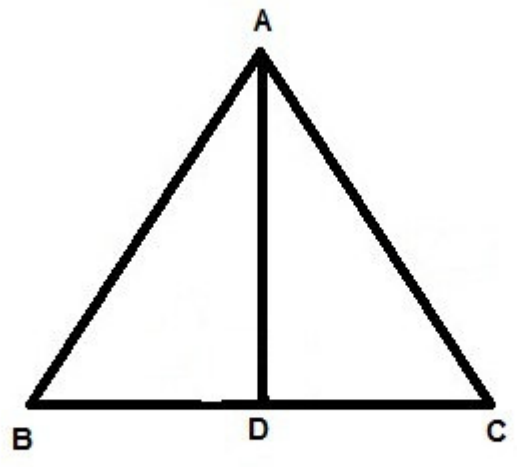


Q.6. In the given figure AB = AC and D is the midpoint of BC.

a) Prove that $\Delta ADB \cong \Delta ADC$

b) Is angle B = angle C

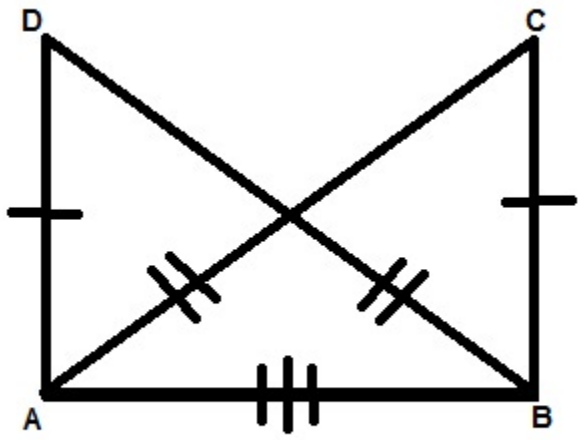
Give reasons.



Q.7. If AC = BD, AD = BC which of the following statements is meaningfully written

a) $\Delta ABC \cong \Delta ABD$

b) $\Delta ABC \cong \Delta BAD$



Q.8. By applying given congruence rule write what additional information is needed to establish congruence

a) $\Delta PQR \cong \Delta FAD$ by SAS congruence rule, PQ = FE and RP = DF

b) $\Delta ABC \cong \Delta RPQ$ by RHS congruence rule, angle B = angle P = 90^o and AB = RP