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:
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 $\Delta AOC \cong \Delta BOD$
Q.5. In the given figure ray AZ bisects angle BAD and angle DCB:

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

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 $\triangle ADB \cong \triangle ADC$

b) Is angle $B = \text{angle } C$?

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

a) $\triangle ABC \cong \triangle ABD$

b) $\triangle ABC \cong \triangle BAD$

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

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

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