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) △ABC ≅ △DEF

b) △PQR ≅ △QRS

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 \( \triangle ABC \) such that \( BD = CE \)

a) Prove that \( \triangle CBD \cong \triangle BCE \)

b) Is angle \( \angle DCB = \angle EBC \)

Give reasons

Q.4. In the given figure AB and CD bisect each other at O. Prove that \( \triangle AOC \cong \triangle BOD \)
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 \( AB = RP \)