

Niscort Fr. Agnel School

Self-Learning Worksheet

Subject- Mathematics

Class – VII

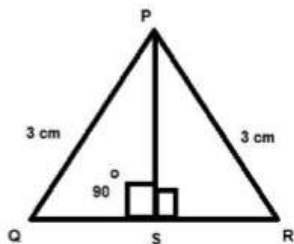
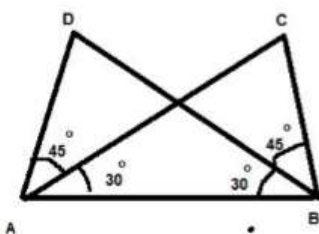
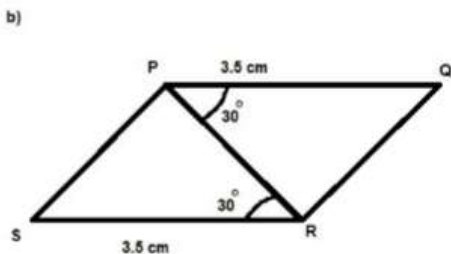
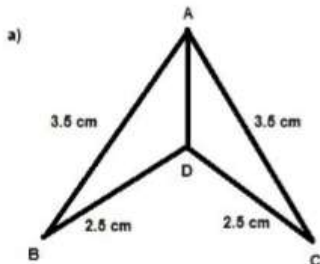
Chapter- Congruence Of Triangles

Q.1. If triangle ABC and triangle DEF are congruent under the correspondence: $ABC \leftrightarrow FED$

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:

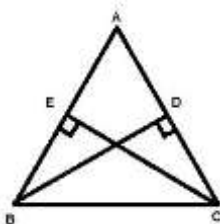


Q.3. In the given figure BD and CE are the altitudes of triangle ABC such that $BD = CE$

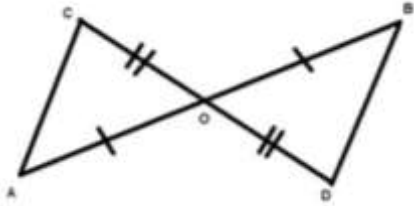
a) Prove that $\triangle CBD \cong \triangle BCE$

b) Is $\angle DCB = \angle ECB$

Give reasons



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



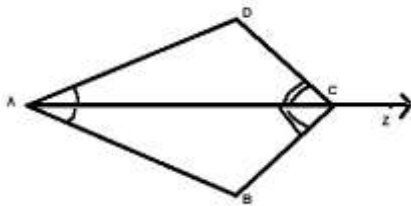
Q.5. In the given figure ray AZ bisects $\angle BAD$ and $\angle DCB$:

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

b) Is $AB = AD$?

c) Is $CD = CB$?

Give reasons

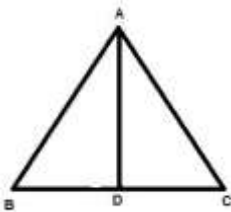


Q.6. In the given figure $AB = AC$ and D is the midpoint of BC.

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

b) Is $\angle B = \angle C$

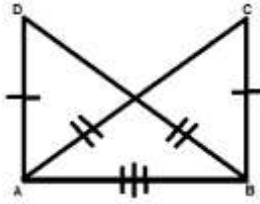
Give reasons.



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. Give any three real life example for congruent shape.

Q9 . If $AB = 5 \text{ cm}$; $\angle B = 50^\circ$; $BC = 5.5 \text{ cm}$; & $DF = 5 \text{ cm}$, $\angle F = 50^\circ$

& $FE = 5.5 \text{ cm}$, then draw the triangles in order they are congruent & also write the criteria.

Q10. If DA is perpendicular to AB & CB is perpendicular to BA & $AC = BD$

Then state which two triangle are congruent & by which criteria.

