

Class 7th congruence of triangle

1. Two triangles are said to be congruent if:

- a) Their corresponding angles are equal
- b) Their corresponding sides are equal
- c) Both their corresponding angles and sides are equal
- d) Their perimeters are equal

2. If $\triangle ABC \cong \triangle PQR$, then which of the following is true?

- a) $AB = PQ$, $BC = QR$, and $AC = PR$
- b) $\angle A = \angle P$, $\angle B = \angle Q$, and $\angle C = \angle R$
- c) Both (a) and (b)
- d) Only (a)

3. If two triangles are congruent by ASA rule, then they must have:

- a) Two sides and one angle equal
- b) Two angles and one side equal
- c) Three sides equal
- d) Three angles equal

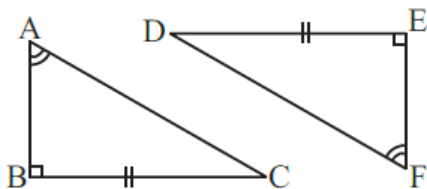
4. Which of the following is NOT a congruence rule for triangles?

- a) SSS (Side-Side-Side)
- b) SAS (Side-Angle-Side)
- c) SSA (Side-Side-Angle)
- d) ASA (Angle-Side-Angle)

5. If two triangles have two sides and the included angle equal, then they are congruent by which rule?

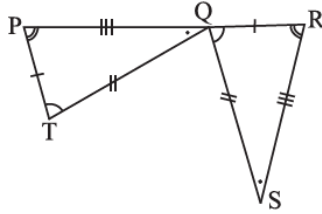
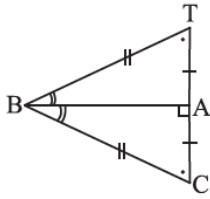
- a) SSS
- b) SAS
- c) ASA
- d) AAS

6. Explain, why $\triangle ABC \cong \triangle FED$

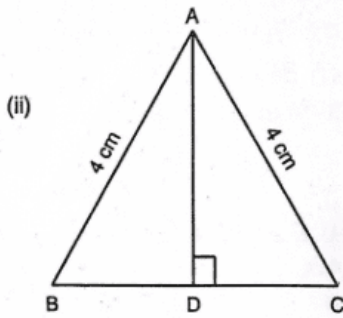


7. Complete the congruence statement:

- 1. $\triangle ABC \cong \triangle ABT$
- 2. $\triangle PQT \cong \triangle RQS$



8. In the following pairs of right triangles, the measures of some part are indicated alongside. State by the application of RHS congruence conditions which are congruent, and also state each result in symbolic form.

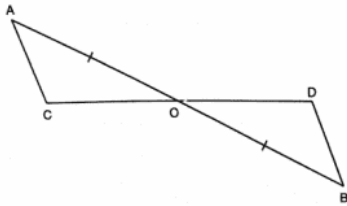


9. In Figure, $AO = OB$ and $\angle A = \angle B$.

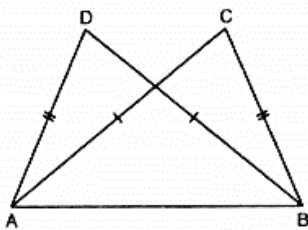
(i) Is $\triangle AOC \cong \triangle BOD$

(ii) State the matching pair you have used, which is not given in the question.

(iii) Is it true to say that $\angle ACO = \angle BDO$?



10. By which Rule following Congruent:



(ii)