

WORK SHEET - 2/4

TRIANGLES

CLASS : IX

SUB : MATHEMATICS

Choose the correct answer :

1. In triangles ABC and PQR, $\angle A = \angle Q$ and $\angle B = \angle R$. Which side of $\triangle PQR$ should be equal to which side of $\triangle ABC$, if two triangles are congruent by ASA.

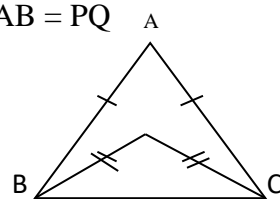
- (a) $AB = PQ$ (b) $AB = QR$ (c) $AC = QR$ (d) $BC = QR$

2. If $\triangle ABC \cong \triangle PQR$ and $\triangle ABC$ is not congruent to $\triangle RPQ$, which of the following is not true?

- (a) $AC = PR$ (b) $BC = PQ$ (c) $QR = BC$ (d) $AB = PQ$

3. In the given fig. the ratio of $\angle ABD : \angle ACD$ is

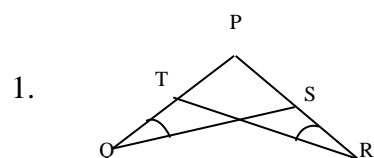
- (a) $1 : 1$ (b) $2 : 1$ (c) $1 : 2$ (d) $2 : 3$



4. If $AB = QR$, $BC = RP$ and $CA = PQ$ then

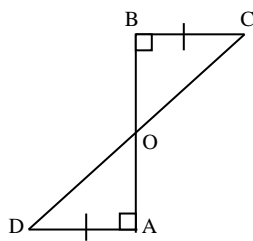
- (a) $\triangle ABC \cong \triangle PQR$ (b) $\triangle CBA \cong \triangle PRQ$ (c) $\triangle BAC \cong \triangle RPQ$ (d) $\triangle PQR \cong \triangle BCA$

Solve the following problems :



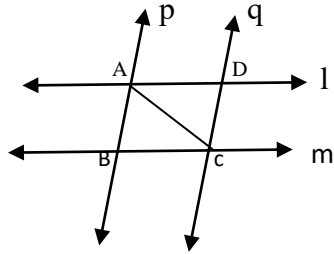
In fig. $PQ = PR$, $\angle Q = \angle R$. Prove that $\triangle PQS \cong \triangle PRT$.

2. AD and BC are equal and perpendiculars to a line segment AB. Show that CD bisects AB.



3. l and m are two parallel lines intersected by another pair of parallel lines 'p' and 'q' (see fig.).

Show that $\Delta ABC \cong \Delta CDA$.



4. In the fig. given below, if $AB = AD$, $\angle x = \angle w$ and $\angle y = \angle z$, then prove that $AP = AQ$.

($\angle BAP = x$, $\angle PAC = y$, $\angle QAC = z$ and $\angle DAQ = w$)

