

Congruency of Triangles: Worksheet -4

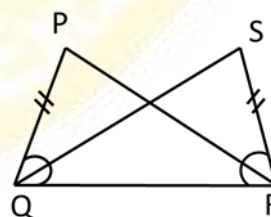
1. Which of the following pairs of triangles are congruent?

(i) $\triangle ABC$, $AB = 2$ cm, $AC = 4$ cm, $\angle A = 40^\circ$; $\triangle XYZ$, $XZ = 2$, $YZ = 4$, $\angle Z = 40^\circ$

(ii) $\triangle PQR$, $PQ = 5$ cm, $PR = 6$ cm, $\angle P = 55^\circ$; $\triangle DEF$, $DE = 6$ cm, $EF = 5$ cm, $\angle D = 55^\circ$

2. In $\triangle PQR$ and $\triangle SQR$ $\overline{PQ} = \overline{SR}$ and $\angle PQR = \angle QRS$.

Show that $\triangle PQR \cong \triangle SQR$.



3. In the adjoining figure \overline{AB} and \overline{CD} intersect at 'O'.

so that $AO = OC$ and $OB = OD$. Show that

$\triangle OAD \cong \triangle OBC$ and hence show that $\overline{AD} = \overline{BC}$.

