MATHEMATICS
CLASS – VII
Chapter- 07
*Congruence of Triangles*

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1. Can two equilateral triangles always be congruent? give reasons.
2. In the given congruent triangles under ASA, find the value of x and y, ΔPQR = ΔSTU.
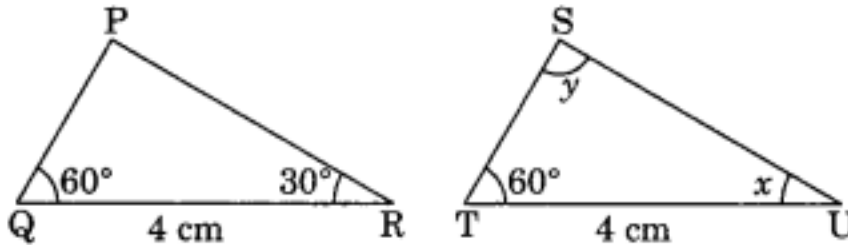
3. What is the angle included between the sies PN and PM of ΔMNP ?
4. If $\Delta DEF \cong \Delta BCA$, write the part of ΔBCA that corresponds to –
   (a) $\angle E$ (b) EF   (c) $\angle F$ (d) DF
5. Without drawing the figures of the triangles, write all six pairs of equal measures in each of the following pairs of congruent triangles
   (a) $\Delta ABC \cong \Delta DEF$ (b) $\Delta XYZ \cong \Delta MLN$
6. By applying ASA congruence rule it is to be established that $\Delta ABC \cong \Delta QRP$ and it is given that $BC = RP$, what additional information is needed to establish the congruence?
7. ABC is an isosceles triangle with AB=AC and D is the mid-point of base BC.
   State three pairs of equal parts in triangles ABD and ACD, is $\Delta ABD \cong ACD$? If so, why?
8. In the figure PQ=CB, PA=CR, $\angle P = \angle C$ is $\Delta PQR \cong \Delta BCA$, if yes state the criterion of congruence.
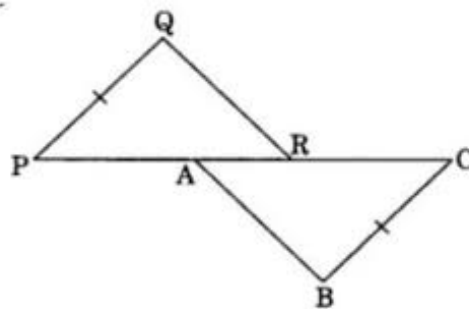
9. In the given figure, BD and CE are altitudes of ΔABC such that BD=CE, then by which congruence rule $\Delta CBD \cong \Delta BCF$?