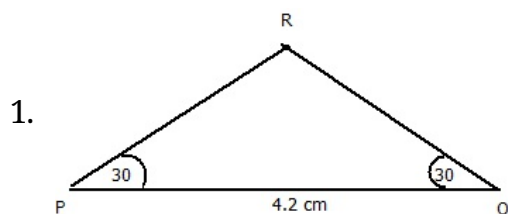


**CBSE Worksheet-1**  
**CLASS –VII Mathematics (Practical Geometry)**

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1. Construct an isosceles triangle PQR where the non-equal side PQ = 4.2 cm and base angles are  $30^\circ$  each.
2. If  $\triangle ABC$  exactly coincides with  $\triangle PQR$  then the triangles are\_\_\_\_\_.
3. In  $\triangle ABC$ ,  $BC = CA$ . Which of its two angles are equal?
4. If  $AB = QP$ ,  $AC = QR$ ,  $BC = PR$ , then  $\triangle ABC \cong \triangle QPR$ , state the congruence criterion involved here.
5. State true or false: The total measure of all the three angles of a triangle is  $360^\circ$ .
6. If we have PQ = 5 cm,  $\angle PQR = 115^\circ$  and  $\angle QRP = 30^\circ$ , can we construct a  $\triangle PQR$  with these measurements?
7. Construct a  $\triangle LMN$ , in which  $MN = 6\text{cm}$ ,  $ML = 4.5\text{ cm}$  and  $\angle M = 30^\circ$ .
8. Construct a right triangle PQR in which  $\angle Q = 90^\circ$ ,  $PR = 6\text{ cm}$  and  $QR = 4\text{ cm}$ .

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**Answer key**



2. congruent.

**Explanation:**

If three sides and three angles of one triangle are equal to three sides and three angles of second triangle then the two triangles are said to be congruent.

3.  $\angle A = \angle B$ .

**Explanation:**

In an isosceles triangle, the angles opposite to equal sides are equal.

In  $\triangle ABC$ , the angle opposite to side BC is  $\angle A$  and the angle opposite to side CA is  $\angle B$ .

Hence, if  $BC = CA$ , then  $\angle A = \angle B$ .

4. SSS.

**Explanation:**

If three sides of a triangle are equal to three corresponding sides of another triangle, then the two triangles are said to be congruent according to SSS congruency criterion.

Given, in  $\triangle ABC$  and  $\triangle QPR$ ,

$AB = QP$ ,  $AC = QR$ ,  $BC = PR$

Therefore,  $\triangle ABC \cong \triangle QPR$ , by SSS congruency criterion.

5. False.

**Explanation:**

According to angle sum property of a triangle, sum of 3 angles of a triangle should be  $180^\circ$ .

6. Yes.

**Explanation:**

Given, in  $\triangle PQR$ ,  $PQ = 5$  cm,  $\angle PQR = 115^\circ$  and  $\angle QRP = 30^\circ$

We can locate point R, by constructing the third  $\angle QRP = 35^\circ$  [ $180^\circ - (115^\circ + 30^\circ)$ ] from the point P, which meets  $\angle PQR$  at R