## **Congruence of Triangle**

Two triangles are said to be congruent if all three corresponding sides are equal and all the three corresponding angles are equal in measure. These triangles can be slides, rotated, flipped and turned to be looked <sup>c</sup> identical. If repositioned, they coincide with each other.

In the above figure,  $\triangle$  ABC and  $\triangle$  PQR are congruent triangles. This means,

Vertices: A and P, B and Q, and C and R are the same.

**Sides:** AB=PQ, QR= BC and AC=PR;

**Angles:**  $\angle A = \angle P$ ,  $\angle B = \angle Q$ , and  $\angle C = \angle R$ .

Congruent triangles are triangles having corresponding sides and angles to be equal. Congruence is denoted by the symbol " $\cong$ ". From the above example, we can write

ABC  $\cong$  PQR. They have the same area and the same perimeter.