## **Triangles: Worksheet-3**

- 1. In  $\triangle$  ABC and  $\triangle$  RST, AB:ST = BC:TR = CA:RS then pair of congruent angles are \_ \_ \_ \_ \_ \_
- 2. The point of intersection of angular bisectors of a triangle is called \_
- 3. The angles of a triangle are in the ratio of 1:2:3 then the ratio of their sides is \_ \_ \_
- 4. In  $\triangle$  ABC,XY is parallel to BC, AX:XB = 2:1 then, as  $\triangle$  AXY: as  $\triangle$ ABC =
- 5. The ratio of the point of trisection is \_\_\_\_\_\_
- 6. In  $\triangle$  ABC, D, E are midpoints of AB and AC. DE: BC = \_\_\_\_\_
- 7. In  $\triangle$  ABC, the bisector  $\angle$  intersects BC in D. If BD : DC = 4 : 7 and AC: 3.5 cm, then AB = \_\_\_
- 8.  $\triangle$  ABC ~  $\triangle$  PQR. If AB = 6; BC = 4; AC = 8 and PR = 6 Then PQ +QR= \_\_\_\_
- 9. The corresponding sides of two similar triangles are in the ratio a: b. The ratio of their areas is \_\_\_\_\_
- 10. In  $\triangle$  ABC,  $\angle$  B = 90° and BD is the altitude BD<sup>2</sup> = \_\_\_\_\_