## Triangle and its Properties: Worksheet -2

1. Two angles of a triangle are  $24^{\circ}$  and  $84^{\circ}$ . Then the third angle is \_ \_ \_

\_\_\_\_\_

2. In  $\triangle$  PQR, PQ = QR and  $\triangle$ R = 80°. Then  $\triangle$ Q = \_\_\_\_\_

3. Two angles of a triangle are 90° and 45°. It is a \_ \_ \_ \_ \_ triangle.

4. In  $\triangle$  ABC,  $\triangle$  A = 60° and AB = AC. Then  $\triangle$  ABC is \_\_\_\_ triangle.

5. In  $\triangle$  ABC, AB = AC and BC is produced to E. If  $\triangle$  B =  $\mathbf{x}^0$ ,  $\triangle$  ACE = ( $\mathbf{x}$  + 40) $^0$ , then  $\mathbf{x}$  = \_\_\_\_\_\_

6. The angles of a triangle are  $x^0$ ,  $2x^0$  and  $(3x + 60)^0$ . Then  $x = _____$ 

7. The triangle whose angles are in the ratio 1: 1: 1 is \_\_\_\_\_

8. In  $\triangle$  ABC, AB = AC then  $\bot$ B -  $\bot$ C =  $\_\_\_\_$ 

9. The triangle in which no two sides are equal is called \_\_\_\_\_ triangle.

10. A triangle in which all sides are equal is called \_ \_ \_ \_ \_ triangle.

12. The sum of any two sides of a triangle is \_\_\_\_\_ than the third side.

13. The difference between any two sides of a triangle is \_ \_ \_ \_ than the third side.

14. A triangle has at least \_ \_ \_ acute angles.

15. If the ratio of the angles of a triangle is 1:1:2, then it is a \_\_\_\_\_
\_\_\_triangle.