**CLASS – VII**  
**SUBJECT- Mathematics**  
**REVISION WORKSHEET- Triangle and its Properties**  
**NAME-**  
**DATE- 10.9.13**

**Draw a rough figure using a scale and a pencil where ever required.**

1. An exterior angle of a triangle DEF is of measure $70^\circ$ and one of its interior opposite angles is of measure $25^\circ$. Find the measure of the other interior opposite angle.

2. The two interior opposite angles of an exterior angle of a triangle LMN are $60^\circ$ and $80^\circ$. Find the measure of the exterior angle.

3. Two angles of a triangle XYZ are $30^\circ$ and $80^\circ$. Find the third angle.

4. One of the angles of a triangle PQR is $80^\circ$ and the other two angles are equal. Find the measure of each of the equal angles.

5. The three angles of a triangle ABC are in the ratio 1:2:1. Find all the angles of the triangle. Classify the triangle in two different ways.

6. Complete the sentence
   (a) A triangle cannot have more than ______ right angle.
   (b) A triangle cannot have more than ______ obtuse angle.
   (c) A triangle can have _____ obtuse angle and _____ acute angles.
   (d) A triangle can have ______ right angle and ______ acute angles. The sum of the acute angles should be______.

7. If all the three angles of a triangle LMN are equal then find the measure of each angle.

8. One of the acute angles of a right angled triangle is $35^\circ$. Find the measure of the other acute angle of the triangle.

9. Two angles of a triangle are equal and its third angle is double of the equal angle. Find the measures of the three angles of the triangle.

10. If one angle of a triangle is $100^\circ$ and the other angles are in the ratio of 2:3, find the angles.

11. Which of the following triplets can be the angles of a triangle
   (a)$80^\circ, 73^\circ, 27^\circ$ (b)$90^\circ, 80^\circ, 30^\circ$ (c)$57^\circ, 61^\circ, 62^\circ$
   (d)$30^\circ, 142^\circ, 20^\circ$

12. Give reason
   (a) A triangle cannot have each angle greater than $60^\circ$.
   (b) A triangle can have each angle equal to $60^\circ$.
   (c) A triangle cannot have each angle less than $60^\circ$. 