# <u>STD VI</u>

# **Triangles**

# Maths Assignment

Instructions to the students : The notes provided must be copied to the maths copy & then do the Home Work in the samecopy.

# Things To Remember

- ♦ A closed figure bounded by three line segment AB, BC, & CA is called a triangle ABC. We denote it by △ ABC or △ BCA or △ CAB
- $A \bigtriangleup ABC$  has ;
  - i) Three vertices , namely A, B, & C ;
  - ii) Three sides , namely AB, BC, & CA ;
  - iii) Three angles, namely <BAC ,< ABC , &< BCA OR < A, < B, < C, respectively.</li>



A triangle is said to be;

- Acute , if each of its angles is less than 90°
- Obtuse if one of its angles is more than 90°
- Right , if one of its angles is 90°

A triangle is said to be ;

- Equilateral, if all its sides are equal
- Isosceles , if two of its sides are equal
- $^{lacksymbol{+}}$  Scalene , if all of its sides are different
  - The sum of all three angles of a triangles is 180°
  - The sum of any two sides of a triangle is greater than the third side
    - Homework

In each of the figures given below state whether the given triangles is acute,



Which of the following can possibly be the angles of a triangle? I) 50°, 30°, 100°, II) 120°, 50°, 10°, III) 45°, 90°, 45°

In each of the figures given below state whether the given triangle is equilateral, isosceles or scalene;



## MATHS PRACTICAL

### Points to remember.

\*Read and understand the experiment.

\*In the Maths Practical Copy write down AIM, MATERIAL REQUIRED, METHODOLOGY, TABULAR COLUMN and CONCLUSION on the ruled page. DIAGRAM and CALCULATION on the plane page.

\*Follow the PROCEDURE properly to get the correct conclusion.

\*MATHS PRACTICAL COPY must be a soft cover Lab copy with atleast 50 to 60 pages.

### **EXPERIMENT NO. 4**

**AIM** : To compare the area of a square and rectangle having same perimeter.

MATERIAL REQUIRED : 1)Plastic straw 2) Ruler 3) Pencil

### **METHODOLOGY** :

Area of a square= Side X side

Area of a rectangle=length X breadth

PROCEDURE : Follow the steps in order

Step 1. Fold the plastic straw , so that it forms a square.

Step2. Place the square on a sheet of paper and mark its vertices.

Step 3. Join the points by using ruler and pencil.

Step 4. Measure its side and calculate the area.

Step 5. Fold the same plastic straw , so that it forms a rectangle.

Step 6. Place the rectangle on a sheet of paper and mark its vertices.

Step 7. Join the points by using ruler and pencil.

Step 8. Measure its length and breadth and calculate the area.

Step 9. Repeat the above steps 1 to 8 atleast four times. In each trial use straw of different length.

### **OBSERVATION AND CALCULATION**

Trial	Length of the	Square		Rectangle		
No.	straw	Side (cm)	Area	Length (cm)	Breadth(cm)	Area ( <i>cm</i> <sup>2</sup> )
			( <i>cm</i> <sup>2</sup> )			
1						
2						
3						
4						

**CONCLUSION** : For a constant perimeter ,area of square is ------(greater/less) than the area of rectangle.