Triangles

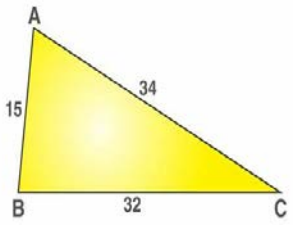
Elements of Triangles: A triangle has six parts, namely three sides and three angles which are called the elements of a triangle.

Classification of Triangles on the basis of sides:

(A) Scalene Triangle: If all the three sides of a triangle are of different lengths, then it is called a scalene triangle.

Example: In the figure, ΔABC is a scalene triangle with AB = 15, BC = 32, and CA = 34.

i.e., AB ≠ BC ≠ CA

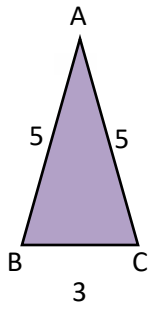


(B) Isosceles Triangle: If any two sides of a triangle are equal, then it is called an isosceles triangle.

Example: In the figure, ΔABC is an isosceles triangle with AB = 5,

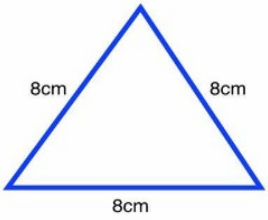
BC = 3, and CA = 5

i.e., AB = AC ≠ BC



(C) Equilateral Triangle: If all the three sides of a triangle are equal, then it is called an equilateral triangle.

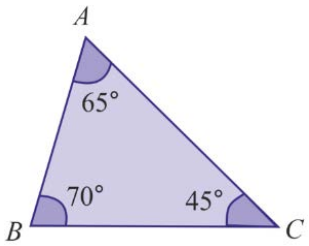
Example: In the figure, given triangle is equilateral triangle with each side is of 8 cm.



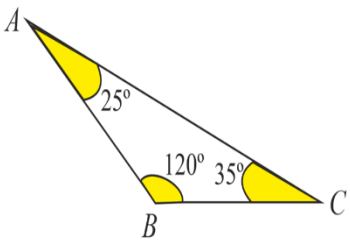
Triangles

Classification of Triangle on the basis of Angles:

(A) Acute Triangle: In acute triangle, all the three angles of triangles are all smaller than 90°.



(B) Obtuse Triangle: In Obtuse triangle, one angle of triangle is greater than 90°.



(C) Right Triangle: In Right Triangle, one angle of triangle is of 90°.