

What is triangle ?

Triangle is a closed figure having 3 sides

Properties of triangle

1. Triangle have 3 Angle
2. Sum of angles is 180
3. Sum of two sides must be greater than third side
4. Side opposite to the largest angle is largest.

Types of triangle

1. Equilateral Triangle :- All sides are Equal.
2. Scalane Triangle :- No any sides are Equal
3. Isoclene Triangle :- Two sides are Equal

Types of Triangle Angle

1. Acute angle traingle :- All angle < 90
2. Obtuse angle triangle :- One angle > 90
3. Right angle triangle :- One angle $= 90$

Pythagoras Theoram

When a right angle opposite side square is equal to the two sides of square

$AB^2 + BC^2 = AC^2$ - Pythagoras Theoram.

Similarity and Congruence of Triangle

Similar Figure :- Figure with same shape but different Size and angle are same are known as Similar Triangle.

How to find similarity in triangles : (SSS) (SAS) (AAA)

SSS(Side side side) - All three sides are equal.

SAS(Side angle side) - Two sides and one angle are equal

AAA(Angle angle angle) - All angles are equal.

Congruence Triangle :- Figure with same size and same shape. They cover each other exactly.

How to find :- SSS, SAS, ASA, RHS