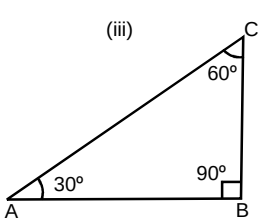
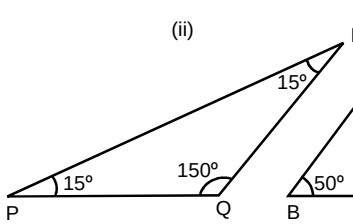
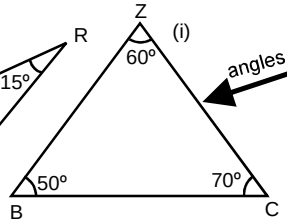
TRIANGLE & IT'S PROPERTIES



Right angled Δ :-
an angle equals to 90º



Obtuse angle Δ :
an angle :-
greater than 90º,
less than 180º

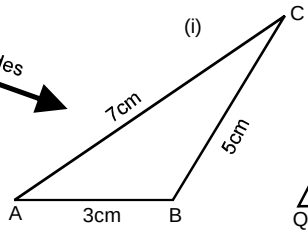


Acute angle Δ :
all angles :-
greater than 0º
less than 90º

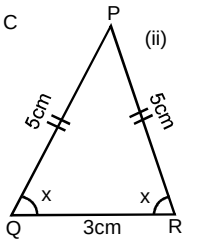
angles

Classification

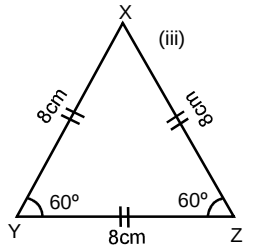
sides



Scalene Δ :
No two sides are equal

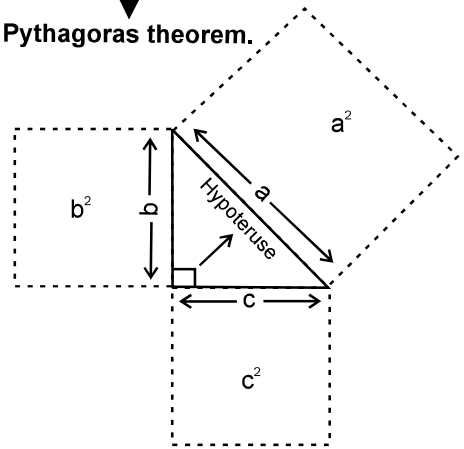


Isosceles Δ :
Two sides are equal,
base angles opposite
to equal sides, are equal



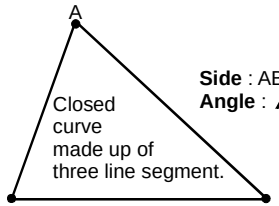
Equilateral Δ :
All sides are equal,
each angle has measure 60º

Pythagoras theorem.



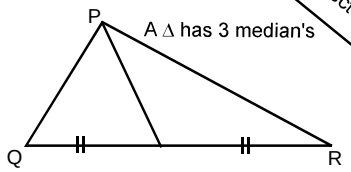
(Hypotenuse)² =(Perpendicular)² + (Base)²
$a^2 = b^2 + c^2$
Converse :- if pythagoras property holds Δ must be right-angled

TRIANGLE & IT'S PROPERTIES

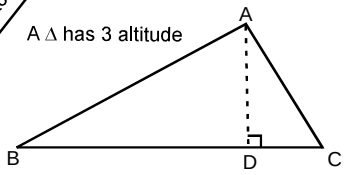


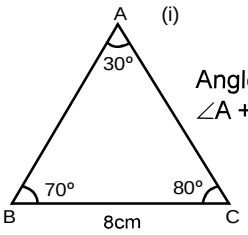
Side : AB, BC, CA
Angle : ∠BAC,∠ABC,∠BCA
Vertices :
A, B, C

Median :- Bisect's the base

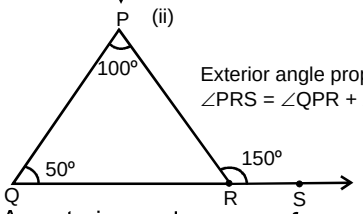


Altitude/Height :- Perpendicular to the base





Angle sum property :
∠A +∠B +∠C = 180º



Exterior angle property :
∠PRS = ∠QPR + ∠PQR

An exterior angle = sum of interior opposite angles

Sum of the length of any two sides of a triangle is greater than the length of the third side.
3 cm + 5 cm > 6 cm
6 cm + 5 cm > 3 cm
6 cm + 3 cm > 5 cm.