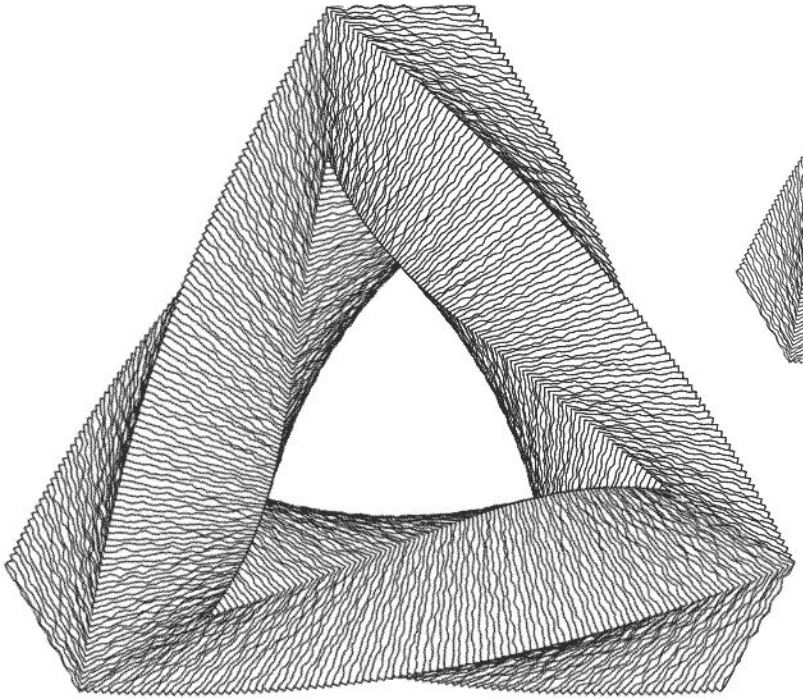
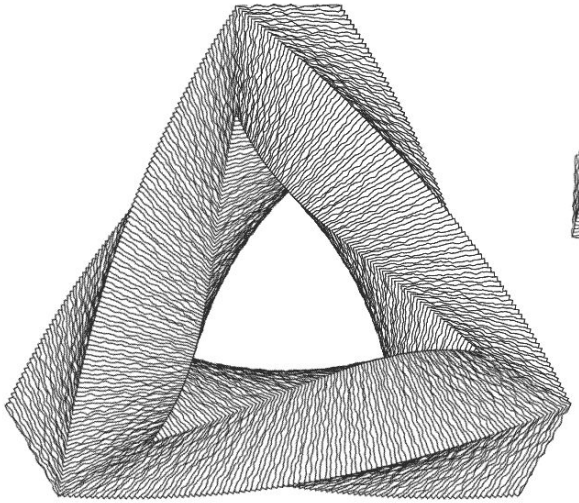
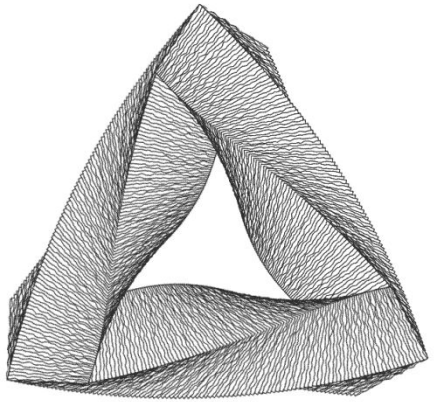
TRIANGLE



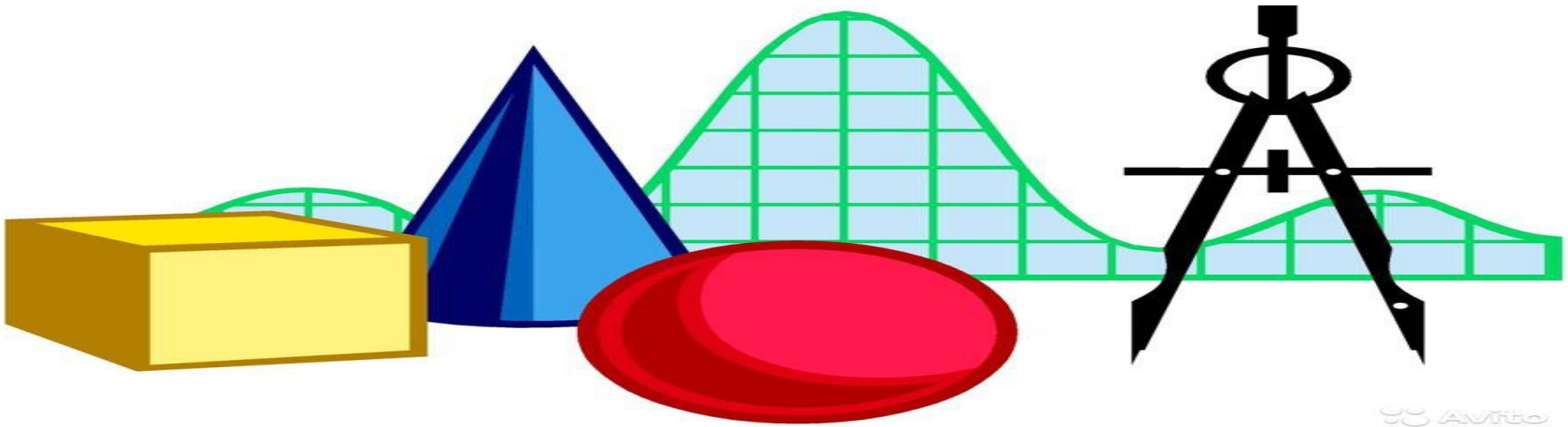




Kazmukasheva Gulim
04401

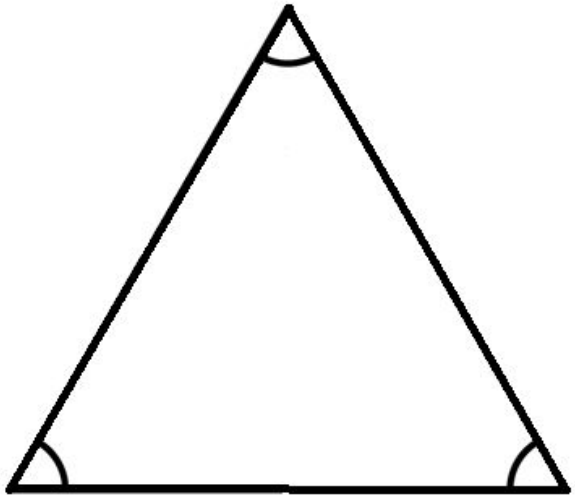
Purpose of the lesson:

An explanation of the new concepts for childrens.

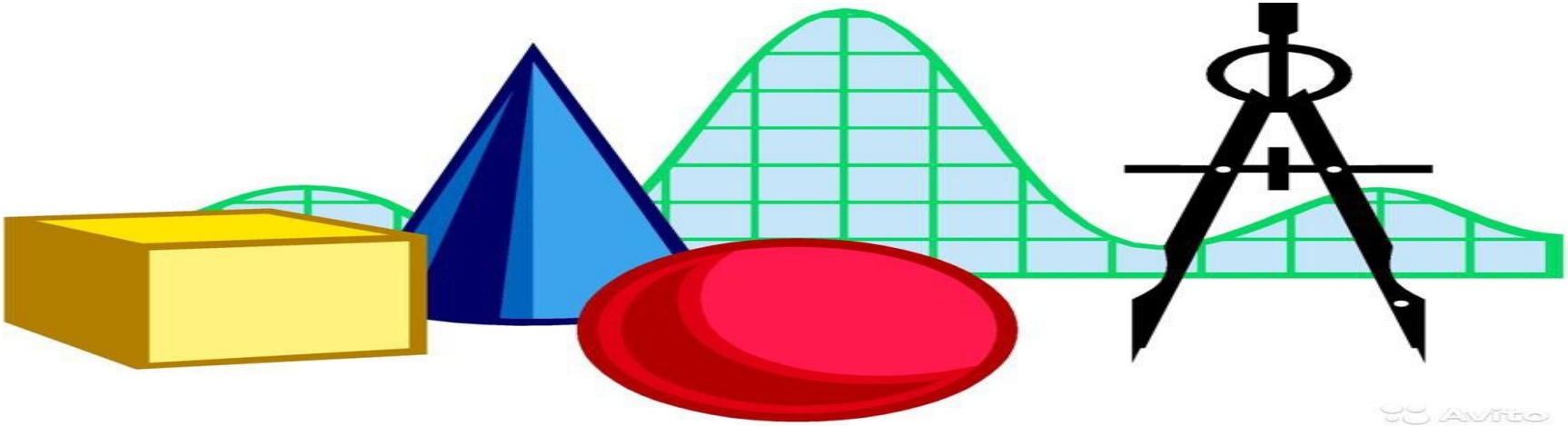


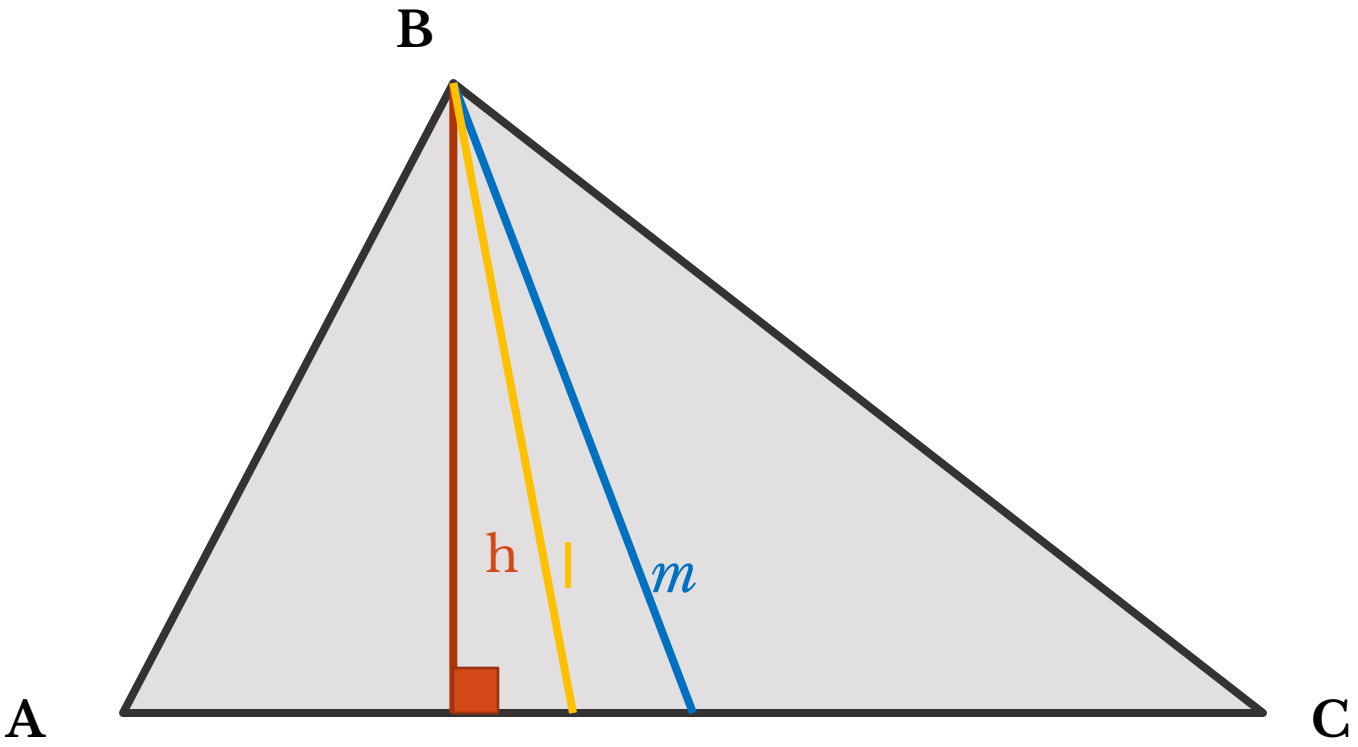
Definition

A triangle is a polygon with exactly three sides



Because it is a polygon, it follows that it also has three vertices and three angles.





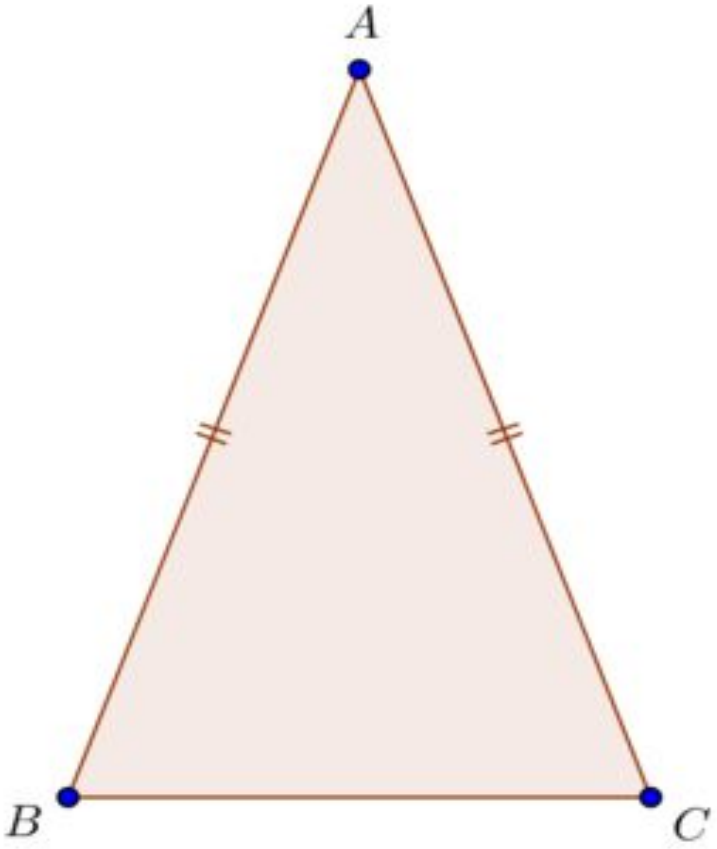
h-height

l- bisector

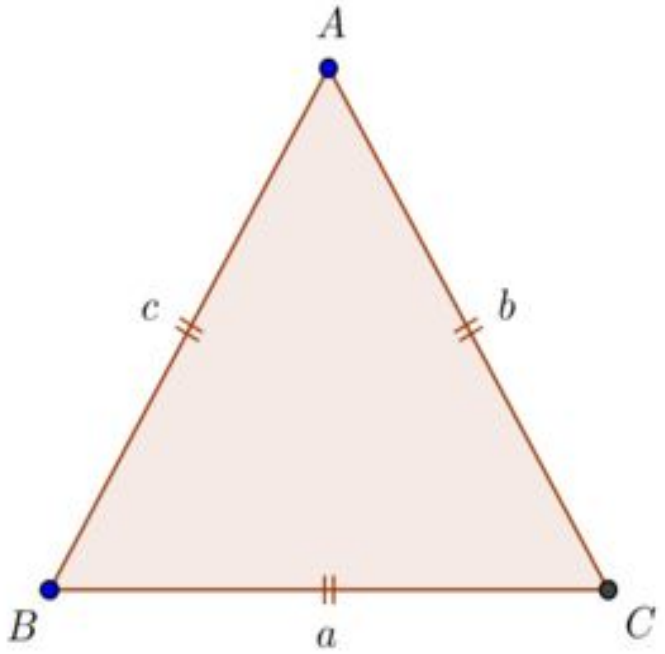
m- median

Types of Triangle

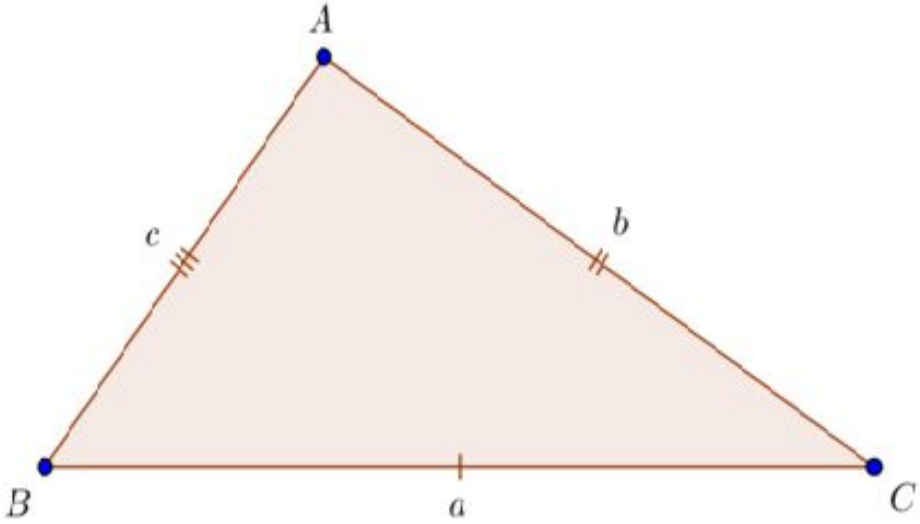
*An **isosceles triangle** is a triangle in which two sides are the same length.*



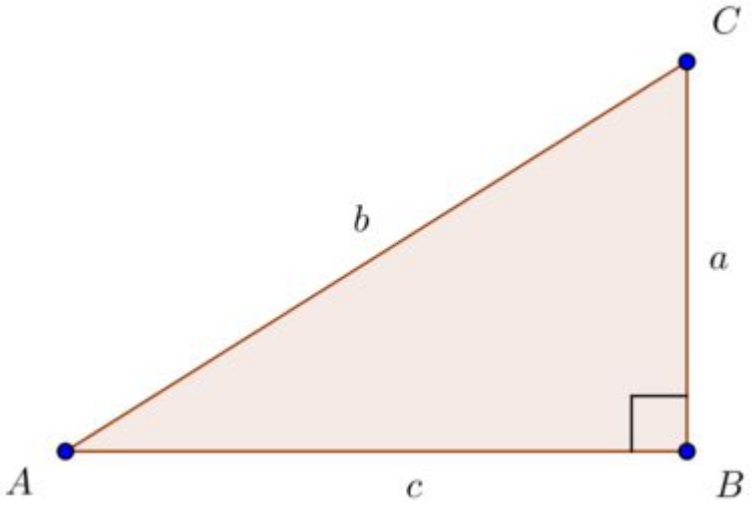
*An **equilateral triangle** is a triangle in which all three sides are the same length:*

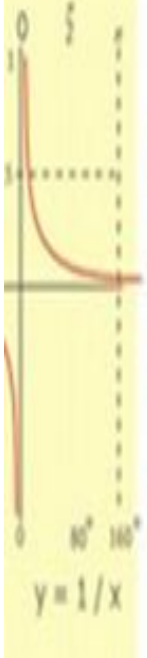


A ***scalene triangle*** *is a triangle in which all three sides are of different lengths*.



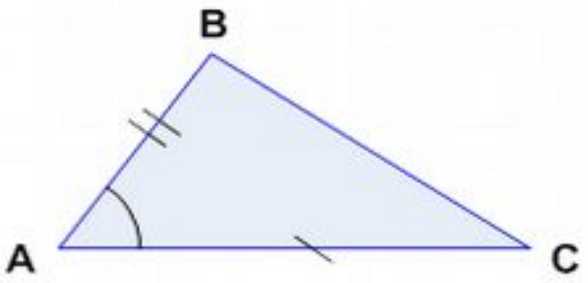
A ***right-angled triangle*** *is a triangle in which one of the vertices is a right angle*.

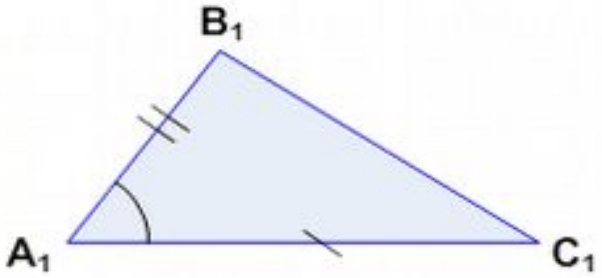




EQUAL TRIANGLES

If 2 sides and the angle between them of the same triangle are accordingly equal to 2 sides and the angle between them of the other triangle, then these triangles are equal.





Given:

AB is equal to A1B1

AC is equal to A1C1

The angle A is equal to the angle A1

To be to prove that:

The triangle ABC is equal to the triangle A1B1C1

The perimeter is the distance around a closed plane figure.

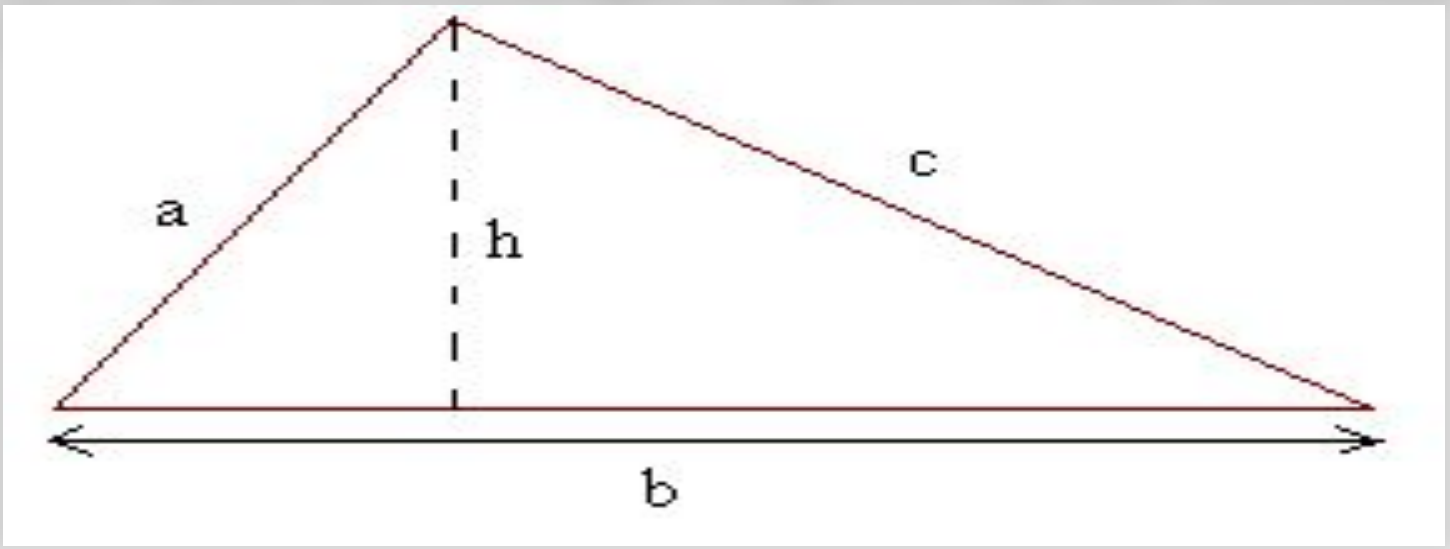
The perimeter, P, of a triangle is given by the formula

$$P = a + b + c$$

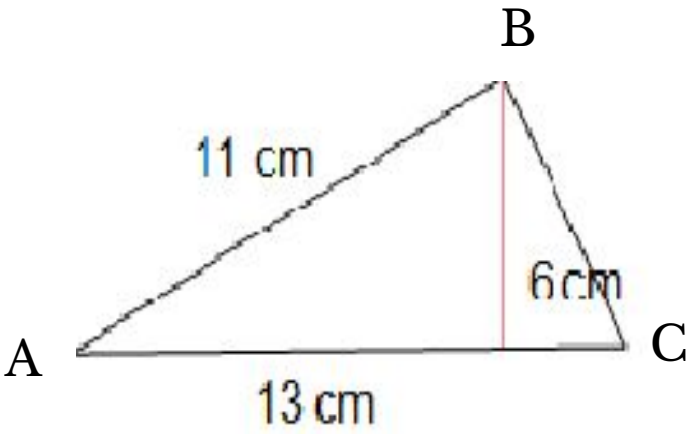
where a, b and c are the side lengths of the triangle.

$$\text{Area} = \frac{bh}{2}$$

The area of s triangle is given by the formula



Find the area of

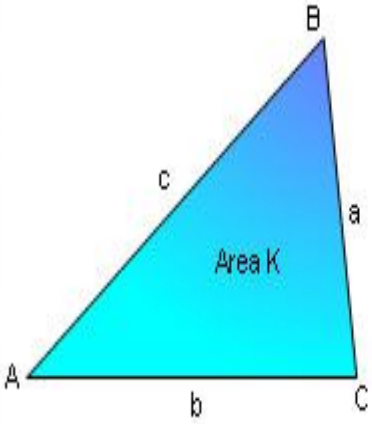


Area = ½ (bh)
Area = ½ (13cm •6cm)
Area = ½ (78 cm²)
Area = 39 cm²

Heron's Formula

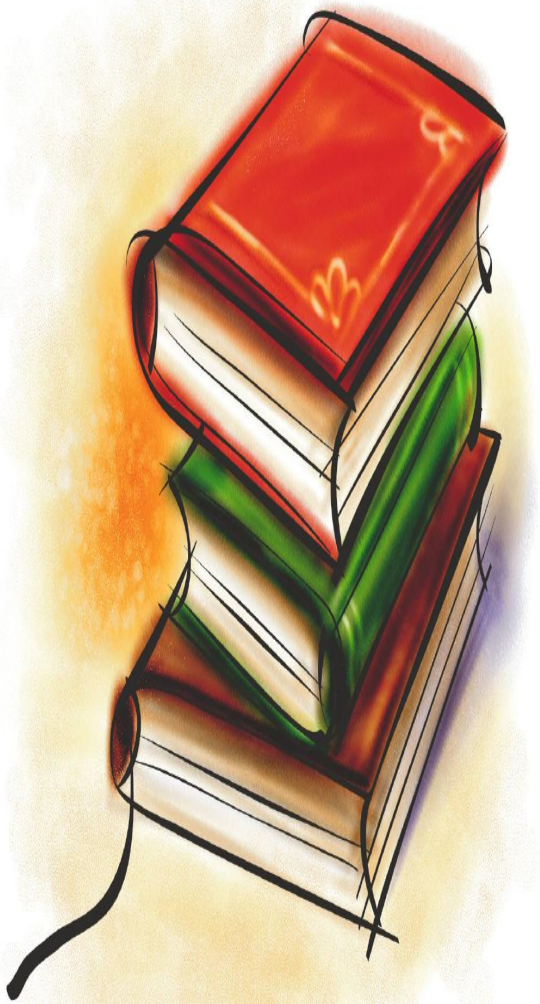
△ABC: sides a, b, c

Semiperimeter: $s = \frac{a+b+c}{2}$

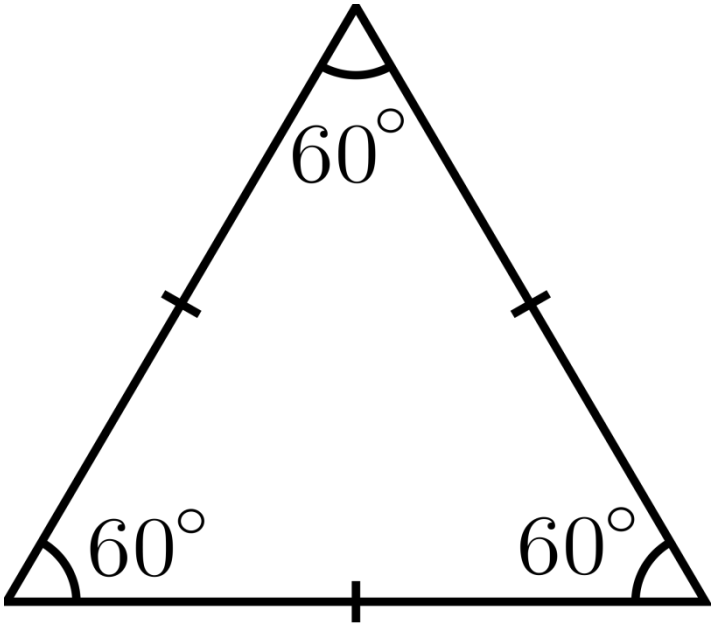


To Prove:

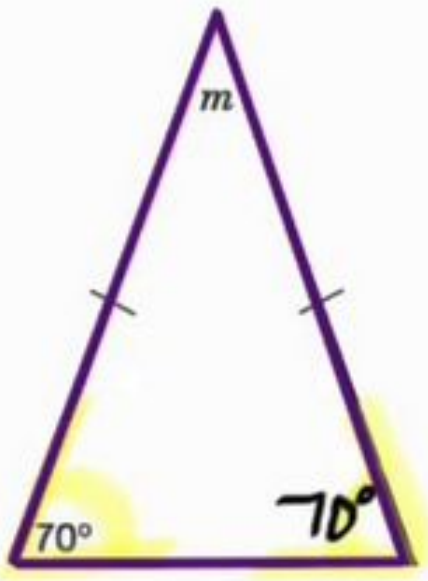
Area △ABC: $K = \sqrt{s(s-a)(s-b)(s-c)}$



Sum of the interi 180°
angles of a triangle
is



The figure below shows an isosceles triangle.



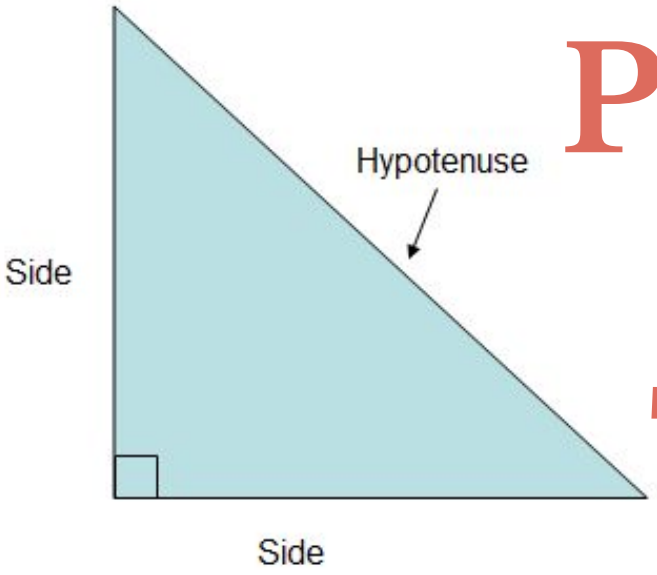
Angle Sum = 180°

$m + 70° + 70° = 180°$

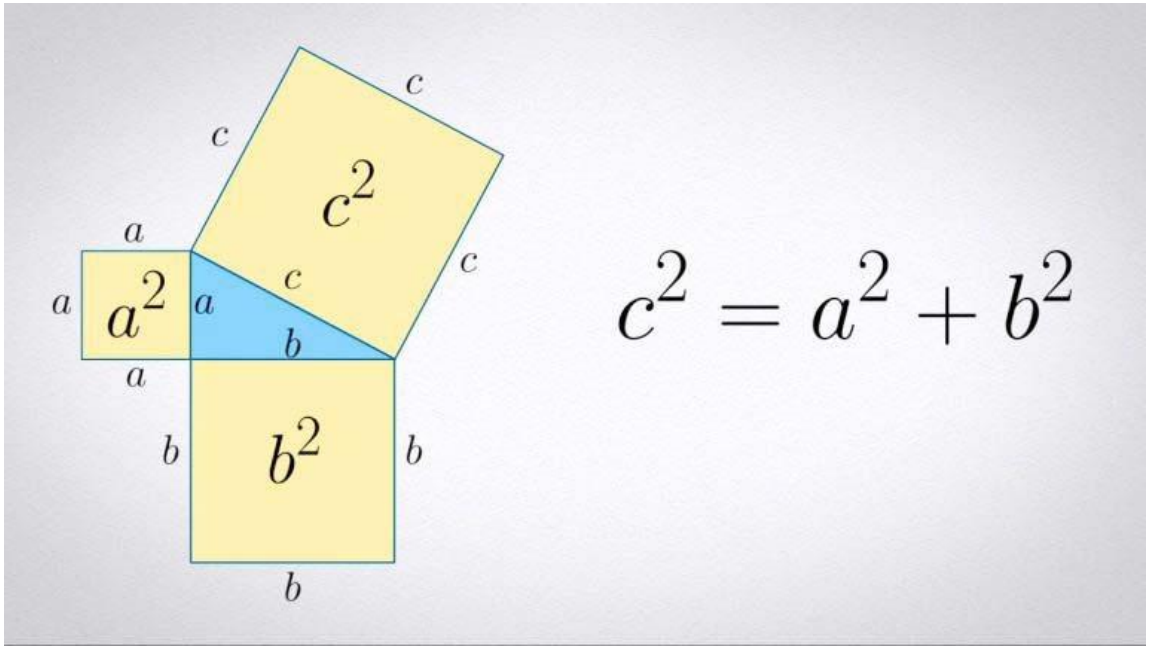
$m + 140° = 180°$

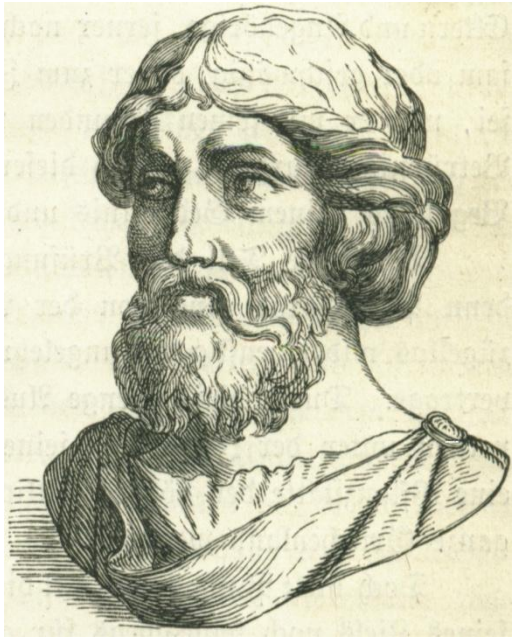
$m = ?$

What is the value of m?

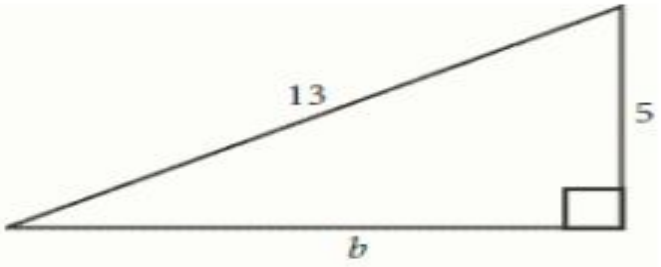


PYTHAGORE AN THEOREM





Find the length of the triangle below



$a^2 + b^2 = c^2$

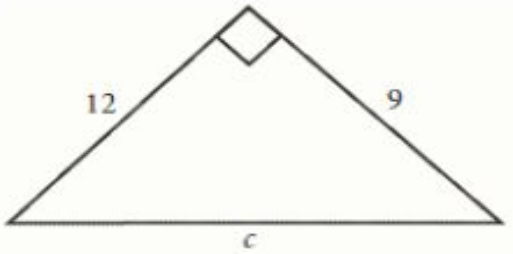
$5^2 + b^2 = 13^2$

$25 + b^2 = 169$

$b^2 = 144$

$\sqrt{b^2} = \sqrt{144}$

$b = 12$



$a^2 + b^2 = c^2$

$12^2 + 9^2 = c^2$

$144 + 81 = c^2$

$225 = c^2$

$\sqrt{225} = \sqrt{c^2}$

$15 = c$