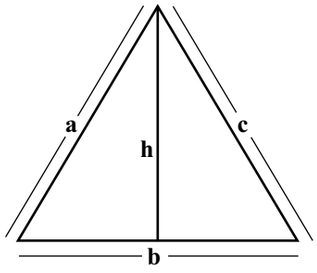
CHAPTER-10

HERON'S FORMULA

Mind Map



Area of triangle (general formula) = $\frac{1}{2} \times b \times h$

where b = base

and h = height

Area of triangle (Herons formula) = $\sqrt{s(s-a)(s-b)(s-c)}$

where s is semi-perimeter and $s = \frac{a+b+c}{2}$

a, b and c are sides of a triangles

Keys points

- When base and height of a triangle are known, then area of triangle is found using general formula.
- Herons formula is used to find area of triangle when all the three sides of triangle are known.
- All sides of an equilateral triangle are equal.
- An isosceles triangle has two equal sides while a scalene triangle has no side equal.
- The sum of all the sides is called the perimeter.
- $(s - a) + (s - b) + (s - c) = 3s - (a + b + c) = s$
- Herons formula can be used to find the area of any kind of triangle.