**Heron’s Formula**

1. The region enclosed within a simple closed figure is called its **area**.
2. **Area of a triangle** = 1  base  height

2

1. **Area of an equilateral triangle** =

3 *a*2

4



sq units, where ‘a’ is the side length of an equilateral triangle.

1. **Semi-perimeter** is half of the perimeter.
2. If a, b and c denote the lengths of the sides of a triangle, then the area of the triangle is calculated by using **Heron's formula**, as given below:

Area of triangle =

, *s*  semi - perimeter  *a + b + c*

*2*

*s (s - a)(s - b)(s - c)*

1. For every triangle, the values of (*s – a*), (*s – b*), and (*s – c*) are positive.
2. Area of a quadrilateral can be calculated by dividing the quadrilateral into two triangles and using Heron's formula for calculating area of each triangle.