

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: IX

Date:

Name:

ID No.....

Heron's Formula

Heron's formula for calculating the area of a triangle using its three sides.

Let a, b, c, be the lengths of the three sides of a triangle ABC. Then area of

$$\Delta ABC = \sqrt{s(s-a)(s-b)(s-c)}, \text{ where } s = \frac{a+b+c}{2}$$

1. What is the semi-perimeter of a triangle with sides 52 cm, 58 cm and 65 cm?

2. Find the area of a triangle whose two sides are 40 cm and 9 cm and semi-perimeter is 45 cm.

3. The sides of a triangle are 35 cm, 54 cm and 61 cm respectively. What is the length of its largest altitude?

4. The perimeter of a triangle is 50 cm. One side of a triangle is 4 cm longer than the smaller side and the third side is 6 cm less than twice the smaller side. Find the area of the triangle.
