



INDIAN SCHOOL DARSAIT

DEPARTMENT OF MATHEMATICS



Subject : Mathematics Topic : Heron's Formula Date of Worksheet : 18-1-2017

Worksheet no: 13

Resource Person: Mrs. Anu Likson

Date : _____

Name of the Student : _____

Class & Division : IX Roll Number : ____

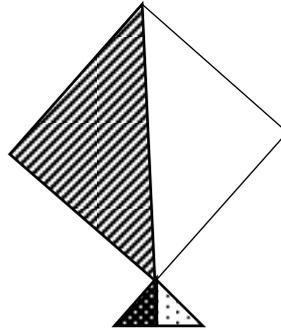
	Section A (Basic Skill)	Marks
	<u>Simplify</u>	
1.	Find the area of a triangle whose base is 10cm and altitude is 6cm.	1
2.	Find the perimeter of the rectangle with length as 12cm and breadth as 7cm.	1
3.	The area of a square is 49cm^2 . Find the side of the square.	1
4.	The perimeter of an equilateral triangle is 12cm and its altitude is 3cm. Find its area	1
5.	Find the area of a circle whose base diameter is 14cm.	1
	<u>Section B</u> Answer the following questions:	
1.	The area of an equilateral triangle is $16\sqrt{3}\text{ m}^2$. What is its perimeter (in metres) ?	2
2.	The sides of a triangle plot are in the ratio 4 : 5: 6 and its perimeter is 150cm, then find its sides.	2
3.	The sides of a triangle are 120m, 170m and 250m. Find its area and height of the triangle if base is 250m.	3
4.	Find the area of a quadrilateral field ABCD in which AB = 50m, BC = 18m, CD = 82m, DA = 50m and $\angle CBD = 90^\circ$.	3
5.	The adjacent sides of a parallelogram are 34cm, 20cm and a diagonal is 42cm. Find the area of the parallelogram.	3
6.	The sides of a triangular field are 51m, 37m and 20m. Find the number of rose beds that can be prepared in the field if each rose bed occupies a space of 6m^2 .	3
7.	Find the area of an isosceles triangle whose one side is 10cm greater than its equal side and its perimeter is 100cm.	4
8.	The base of an isosceles triangle is 12cm and its perimeter is 32cm. Find its area.	4
9.	A rhombus field has green grass for 20 cows to graze. If each side of the rhombus is 52m and longer diagonal is 96m, how much area of the grass field will each cow be getting?	4
10.	A kite is in the shape of a square with side 16cm and an isosceles triangle of base 4cm and equal side of 6cm each. It is made up of two	4



INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS



colours as shown in the figure. Find the area of paper of each colour used in it.



Section C

1.	A square and an equilateral triangle have equal perimeters. If the diagonal of the square is $12\sqrt{2}$ cm, then find the area of the triangle.	3
2.	The base and Hypotenuse of a right triangle are respectively 8cm and 10cm long. Find its area.	3
3.	The sides of a triangle are x , $x+1$, $2x - 1$ and its area is $x\sqrt{10}$. What is the value of x ?	4
4.	Find the percentage increase in the area of a triangle, if its each side is doubled.	4
5.	The perimeter of a triangle is 120cm and its sides are in the ratio 5 : 12 :13. Find the area of the triangle.	4