

# INDIAN SCHOOL AL WADI AL KABIR

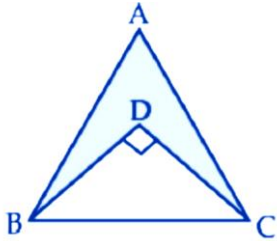
**Class: IX**

**Sub : MATHEMATICS**

**Date: 08-05-2020**

**Topic: Heron's formula**

1.	The base of a right triangle is 6 cm and hypotenuse is 10 cm. Its area is (A) $8 \text{ cm}^2$ (B) $64 \text{ cm}^2$ (C) $24 \text{ cm}^2$ (D) $48 \text{ cm}^2$	C
2.	The area of an equilateral triangle with side $2\sqrt{3}$ cm is (A) $4\sqrt{3}\text{cm}^2$ (B) $8\text{cm}^2$ (C) $3 \text{ cm}^2$ (D) $3\sqrt{3} \text{ cm}^2$	D
3.	If the area of an isosceles right-angled triangle is $32\text{cm}^2$ , then the length of its hypotenuse is (A) $4\sqrt{2}\text{cm}$ (B) $8\sqrt{2} \text{ cm}$ (C) $64 \text{ cm}$ (D) $8 \text{ cm}$	B
4.	Two sides of a triangle are 13 cm and 14 cm and its semi-perimeter is 18 cm, then the third side of the triangle is (A) 9cm      (B) 11cm      (C) 18cm      (D) 15cm	A
5.	The length of each side of an equilateral triangle having an area of $9\sqrt{3} \text{ cm}^2$ is (A) 9cm      (B) 36cm      (C) 4cm      (D) 6cm	D
6.	The area of $\Delta ABC$ in which $AB = AC = 4 \text{ cm}$ and $\angle A = 90^\circ$ is (A) $8\text{cm}^2$ (B) $16\text{cm}^2$ (C) $26\text{cm}^2$ (D) $36\text{cm}^2$	A
7.	The height corresponding to the longest side of the triangle whose sides are 42cm, 34cm and 20cm in length is (A) 15cm      (B) 36cm      (C) 16cm      (D) 23cm	C
8.	The base of a right angled triangle is 48cm and its hypotenuse is 50cm, then its area is (A) $150\text{cm}^2$ (B) $336\text{cm}^2$ (C) $300\text{cm}^2$ (D) $475\text{cm}^2$	B
9.	The perimeter of a triangle is 120 cm and its sides are in the ratio 5:12:13. Find the area of the triangle.	$480 \text{ cm}^2$

10.	Find the area of an isosceles triangle whose one side is 10cm greater than each of its equal sides and perimeter is 100cm.	$200\sqrt{5}cm^2$
11.	Find the area of an isosceles triangle, whose equal sides are of length 15 cm each and third side is 12 cm.	$18\sqrt{21} cm^2$
12.	Find the area of a triangle whose perimeter is 180cm and its two sides are 80cm and 18cm. Calculate the altitude of the triangle corresponding to its shortest side.	$720cm^2$ , 80cm
13.	The perimeter of a rhombus is 400m and one of its diagonal is 160m. Find the area of the rhombus.	$9600m^2$
14.	Find the area of a quadrilateral ABCD, where AB = 7cm, BC = 6cm, CD = 12cm, AD = 15cm and AC = 9cm.	$74.98cm^2$
15.	The adjacent sides of a parallelogram are 34cm, 20cm and a diagonal is 42cm. Find the area of the parallelogram.	$672cm^2$
16.	The sides of a quadrilateral taken in order are 9m, 40m, 15m and 28m respectively. The angle contained by the first two sides is a right angle. Find its area.	$306m^2$
17.	In the figure, $\triangle ABC$ is equilateral with side 10cm and $\triangle DBC$ is right angled at D. If BD = 8cm, find the area of the shaded portion.	$25\sqrt{3}-24cm^2$
		
18.	Find the area of a triangle whose two sides are 24cm and 10cm and the perimeter of the triangle is 62cm.	$120cm^2$
19.	A field is in the shape of a trapezium whose parallel sides are 25m and 10m. The non-parallel sides are 14m and 13m. Find the area of the field.	$196m^2$
20.	Two parallel sides of a trapezium are 120cm and 154cm and the non-parallel sides are 50cm and 52cm. Find the area of the trapezium.	$6576cm^2$
21.	Black and white coloured triangular sheets are used to make a toy as shown in the figure. Find the total area of black and white sheets used for making the toy.	Black $16\sqrt{2}cm^2$ White $16\sqrt{2}cm^2$
	