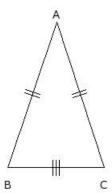
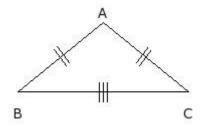
## EduSahara™ Learning Center Assignment

Grade : Class IX, CBSE Chapter : Heron's Formula Name : Heron's Formula

1. In an isosceles triangle  $\triangle$ ABC, if BC = 12 cm, AB = CA = 19 cm, then area of the triangle =



- (i) 108.17 sq.cm (ii) 104.17 sq.cm (iii) 133.17 sq.cm (iv) 125.17 sq.cm (v) 84.17 sq.cm
- 2. In an isosceles triangle  $\triangle$ ABC, if BC = 17 cm, CA = AB and perimeter is 39 cm, then area of the triangle =



- (i) 62.35 sq.cm (ii) 64.35 sq.cm (iii) 56.35 sq.cm (iv) 54.35 sq.cm (v) 59.35 sq.cm
- 3. A triangular park has sides 190 mt, 170 mt and 130 mt. A gardener has to put a fence all around it and also plant grass inside. How much area does he need to plant?
  - (i) 11480.62 sq.mts (ii) 10180.62 sq.mts (iii) 13380.62 sq.mts
  - (iv) 8280.62 sq.mts (v) 10780.62 sq.mts
- A triangular park has sides 130 mt, 130 mt and 200 mt. A gardener has to put a fence all around it and also plant 4. grass inside. Find the cost of fencing it with barbed wire at the rate of ₹25 per metre leaving a space of 2 mt wide for the gate on one side.
  - (i) ₹12850.00 (ii) ₹11450.00 (iii) ₹9950.00
  - (iv) ₹11650.00 (v) ₹10150.00
- The sides of a triangular plot are in the ratio 15: 15: 13 5. and perimeter is 430 mt . Find its area
  - (i) 8937.03 sq.mts (ii) 8727.03 sq.mts (iii) 8787.03 sq.mts
  - (iv) 8957.03 sq.mts (v) 8607.03 sq.mts
- 6. A traffic sign board is in the shape of an equilateral triangle. If its perimeter is 33 cm, what is its area?
  - (i)
- (ii)
- (iii)

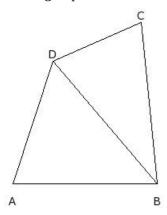
57.39 sq.cm 52.39 sq.cm 49.39 sq.cm

(iv) 55.39 sq.cm (v) 47.39 sq.cm

Keerthi has a triangular field with sides 170 mt, 120 mt and 130 mt. She wanted to grow onions and radish. She 7. divided the field into two parts by joining the mid-point of the longest side to the opposite vertex, and grew onions in one part and radish in the other part. How much area has been used for radish.

- (i) 3938.44 sq.mts (ii) 3888.44 sq.mts (iii) 3728.44 sq.mts
- (iv) 4168.44 sq.mts (v) 3768.44 sq.mts

Some volunteers on a cleanliness drive decided to clean an open ground in the shape of a quadrilateral ABCD, where AB = 18.00 mt, BC = 20.00 mt, CD = 12.00 mt, and DA = 16.00 mt. They split into two groups m and n and started cleaning on either sides of the diagonal BD. Group m marked their perimeter which is of length 54 mt. Which group cleaned more area ? Find the total area cleaned by both groups.



- (i) group m, 251.30 sq.mts
- (ii) group m, 275.30 sq.mts
- (iii) group n, 228.30 sq.mts
- (iv) group m, 266.30 sq.mts
- (v) group m, 235.30 sq.mts

A farmer has a piece of land in the shape of a rhombus. He decided to divide the land into two equal parts such that 9. both his son and daughter could work on the land to produce different crops. If the perimeter of the land is 240.00 mt and one of the diagonals is 80 mt, how much area will each get for their crops?

- (i) 1958.85 sq.mts (ii) 1738.85 sq.mts (iii) 1548.85 sq.mts
- (iv) 1788.85 sq.mts
- 10. A rhombus shaped field has green grass for 8 cows to graze. If the perimeter of the field is 560.00 mt and one of the diagonals is 150 mt, how much area of the grass field will each cow be grazing?
  - (i) 2186.63 sq.mts (ii) 2216.63 sq.mts (iii) 2056.63 sq.mts
  - (iv) 2346.63 sq.mts (v) 2436.63 sq.mts
- 11. A triangle and a parallelogram, both have the same base and the same area. If the sides of the triangle are 26 cm, 22 cm and 19 cm, and the parallelogram stands on the base 22 cm, find the height of the parallelogram
  - (i) 7.30 cm (ii) 8.30 cm (iii) 9.30 cm
  - (iv) 10.30 cm (v) 11.30 cm

- 12. A field is in the shape of a trapezium whose parallel sides are 45 mt and 15 mt. The non parallel sides are 26 mt and 30 mt. Find the area of the field.
  - (i) 716.96 sq.mts (ii) 680.96 sq.mts (iii) 688.96 sq.mts
  - (iv) 717.96 sq.mts (v) 702.96 sq.mts
- 13. A floral design on a floor is made up of 8 triangular shaped tiles. The sides of each tile are 30 cm, 18 cm and 14 cm. If the cost of polishing the tiles is ₹1.00 per sq cm, find the total cost to polishing all the tiles.
  - (i) ₹669.17 (ii) ₹647.17 (iii) ₹686.17
  - (iv) ₹649.17 (v) ₹662.17

## **Assignment Key**

- 1) (i)
- 2) (v)

- 3) (v) 4) (ii)
- 5) (iii)
- 6) (ii)
- 7) (ii)
- 8) (i) 9) (iv)
- 10) (ii)
- 11) (iii)
- 12) (v)
- 13) (v)