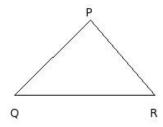
Name : Heron's Formula

**Chapter: Coordinate Geometry** 

Grade: SSC Grade X

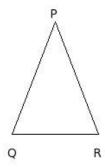
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1. In  $\triangle PQR$ , if QR = 17 cm, RP = 12 cm, PQ = 13 cm, then area of the triangle =



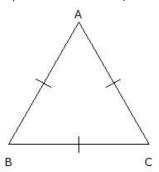
(i) 82.77 sq.cm (ii) 80.77 sq.cm (iii) 72.77 sq.cm (iv) 77.77 sq.cm (v) 74.77 sq.cm

2. In  $\triangle PQR$ , if QR = 10 cm, RP = 14 cm and perimeter = 38 cm, then area of the triangle =



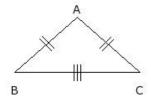
(i) 70.38 sq.cm (ii) 68.38 sq.cm (iii) 65.38 sq.cm (iv) 60.38 sq.cm (v) 62.38 sq.cm

3. If perimeter of an equilateral triangle 51 cm, the area of the equilateral triangle =



(i) 112.14 sq.cm (ii) 141.14 sq.cm (iii) 128.14 sq.cm (iv) 125.14 sq.cm (v) 107.14 sq.cm

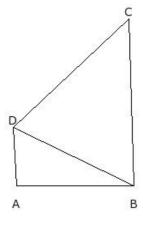
4. In an isosceles triangle  $\triangle ABC$ , if BC = 15 cm, CA = AB and perimeter is 35 cm, then area of the triangle =



(i) 46.61 sq.cm (ii) 49.61 sq.cm (iii) 54.61 sq.cm (iv) 52.61 sq.cm (v) 44.61 sq.cm

- A triangular park has sides 190 m, 120 m and 170 m. A gardener has to put a fence all around it and also plant grass inside. How much area does he need to plant?
  - (i) 11839.92 sq.m (ii) 9439.92 sq.m (iii) 10239.92 sq.m (iv) 10039.92 sq.m (v) 8739.92 sq.m

- A triangular park has sides 180 m, 180 m and 170 m. A gardener has to put a fence all around it and also plant 6. grass inside. Find the cost of fencing it with barbed wire at the rate of ₹9 per metre leaving a space of 5 m wide for the gate on one side.
  - (i) ₹4795.00 (ii) ₹4725.00 (iii) ₹4555.00 (iv) ₹5005.00 (v) ₹4475.00
- 7. The sides of a triangular plot are in the ratio 9:14:14 and perimeter is 370 m. Find its area
  - (i) 6235.68 sq.m (ii) 5965.68 sq.m (iii) 6125.68 sq.m (iv) 5745.68 sq.m (v) 5785.68 sq.m
- 8. A traffic sign board is in the shape of an equilateral triangle . If its perimeter is 48 cm, what is its area ?
  - (i) 105.85 sq.cm (ii) 128.85 sq.cm (iii) 96.85 sq.cm (iv) 124.85 sq.cm (v) 110.85 sq.cm
- Manisha has a triangular field with sides 100 m, 130 m and 100 m. She wanted to grow pumpkins and brinjals. She 9. divided the field into two parts by joining the mid-point of the longest side to the opposite vertex, and grew pumpkins in one part and brinjals in the other part. How much area has been used for pumpkins.
  - (i) 2469.79 sq.m (ii) 2299.79 sq.m (iii) 2539.79 sq.m (iv) 2719.79 sq.m (v) 2309.79 sq.m
- Some volunteers on a cleanliness drive decided to clean an open ground in the shape of a quadrilateral ABCD, where AB = 14.00 m, BC = 20.00 m, CD = 19.00 m, and DA = 7.00 m. 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 37 m. Which group cleaned more area? Find the total area cleaned by both groups.



- (i) group n, 205.96 sq.m (ii) group n, 190.96 sq.m (iii) group n, 178.96 sq.m (iv) group m, 208.96 sq.m
- (v) group n,173.96 sq.m
- A farmer has a piece of land in the shape of a rhombus. He decided to divide the land into two equal parts such 11. that both his son and daughter could work on the land to produce different crops. If the perimeter of the land is 760.00 m and one of the diagonals is 150 m, how much area will each get for their crops?
  - (i) 14492.82 sq.m (ii) 13092.82 sq.m (iii) 12792.82 sq.m (iv) 14792.82 sq.m (v) 11292.82 sq.m
- 12. A rhombus shaped field has green grass for 20 cows to graze. If the perimeter of the field is 760.00 m and one of the diagonals is 150 m, how much area of the grass field will each cow be grazing?
  - (i) 1029.28 sq.m (ii) 1429.28 sq.m (iii) 1549.28 sq.m (iv) 1309.28 sq.m (v) 1179.28 sq.m
- 13. A triangle and a parallelogram, both have the same base and the same area. If the sides of the triangle are 16 cm, 22 cm and 12 cm, and the parallelogram stands on the base 22 cm, find the height of the parallelogram
  - (i) 3.26 cm (ii) 2.26 cm (iii) 6.26 cm (iv) 4.26 cm (v) 5.26 cm
- 14. A field is in the shape of a trapezium whose parallel sides are 35 m and 13 m. The non parallel sides are 12 m and 17 m. Find the area of the field.
  - (i) 232.80 sq.m (ii) 203.80 sq.m (iii) 220.80 sq.m (iv) 233.80 sq.m (v) 204.80 sq.m

- A floral design on a floor is made up of 12 triangular shaped tiles. The sides of each tile are 25 cm, 30 cm and 25 cm. If the cost of polishing the tiles is ₹2.50 per sq cm, find the total cost to polishing all the tiles.
  - (i) \$8880.00 (ii) \$8860.00 (iii) \$9280.00 (iv) \$9140.00 (v) \$9000.00

Assignment Key					
1) (iv)	2) (iii)	3) (iv)	4) (ii)	5) (iv)	6) (ii)
7) (ii)	8) (v)	9) (i)	10) (ii)	11) (ii)	12) (iv)
13) (iv)	14) (iii)	15) (v)			

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