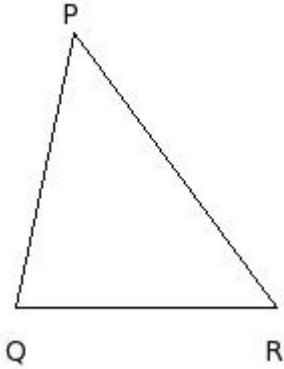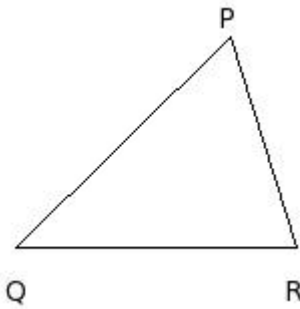# EduSahara™ Learning Center Assignment

Grade : Class X, SSC
Chapter : Coordinate Geometry
Name : Heron's Formula

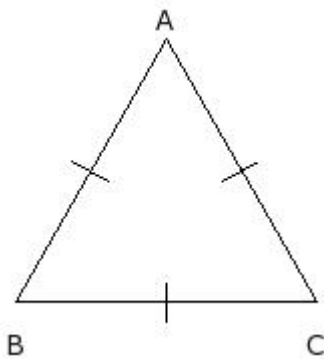1. In $\triangle$PQR, if QR = 13 cm, RP = 17 cm, PQ = 14 cm, then area of the triangle =

   (i) 93.99 sq.cm (ii) 85.99 sq.cm (iii) 91.99 sq.cm (iv) 88.99 sq.cm (v) 83.99 sq.cm

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2. In $\triangle$PQR, if QR = 14 cm, RP = 11 cm and perimeter = 40 cm, then area of the triangle =
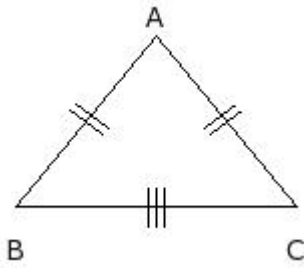

   (i) 70.48 sq.cm (ii) 68.48 sq.cm (iii) 78.48 sq.cm (iv) 73.48 sq.cm (v) 76.48 sq.cm

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3. If perimeter of an equilateral triangle 45 cm, the area of the equilateral triangle =

   (i) 102.43 sq.cm (ii) 92.43 sq.cm (iii) 97.43 sq.cm (iv) 94.43 sq.cm (v) 100.43 sq.cm

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4. In an isosceles triangle $\triangle$ABC, if BC = 14 cm, CA = AB and perimeter is 36 cm, then area of the triangle =

(i) 56.40 sq.cm (ii) 54.40 sq.cm (iii) 64.40 sq.cm (iv) 59.40 sq.cm (v) 62.40 sq.cm

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5. A triangular park has sides 200 mt, 160 mt and 100 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)   8004.01 sq.mts (ii) 7924.01 sq.mts (iii) 8184.01 sq.mts

(iv) 7904.01 sq.mts (v) 7654.01 sq.mts

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6. A triangular park has sides 150 mt, 180 mt and 130 mt. A gardener has to put a fence all around it and also plant grass inside. Find the cost of fencing it with barbed wire at the rate of ₹14 per metre leaving a space of 3 mt wide for the gate on one side.

(i)   ₹6258.00 (ii) ₹6328.00 (iii) ₹6518.00

(iv) ₹6538.00 (v) ₹6398.00

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7. The sides of a triangular plot are in the ratio   7 : 14 : 13

and perimeter is 340 mt . Find its area

(i)   4736.64 sq.mts (ii) 4586.64 sq.mts (iii) 4516.64 sq.mts

(iv) 4476.64 sq.mts (v) 4236.64 sq.mts

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8. A traffic sign board is in the shape of an equilateral triangle . If its perimeter is 36 cm, what is its area ?

(i)   57.35 sq.cm (ii) 67.35 sq.cm (iii) 62.35 sq.cm

(iv) 59.35 sq.cm (v) 65.35 sq.cm

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9. Mallika has a triangular field with sides 130 mt, 170 mt and 200 mt. She wanted to grow carrots and cauliflowers. She divided the field into two parts by joining the mid-point of the longest side to the opposite vertex, and grew carrots in one part and cauliflowers in the other part. How much area has been used for carrots.

(i)   5537.23 sq.mts (ii) 5407.23 sq.mts (iii) 5337.23 sq.mts

(iv) 5627.23 sq.mts (v) 5477.23 sq.mts

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10. Some volunteers on a cleanliness drive decided to clean an open ground in the shape of a quadrilateral ABCD, where AB = 8.00 mt, BC = 12.00 mt, CD = 10.00 mt, and DA = 9.00 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 26 mt. Which group cleaned more area ? Find the total area cleaned by both groups.
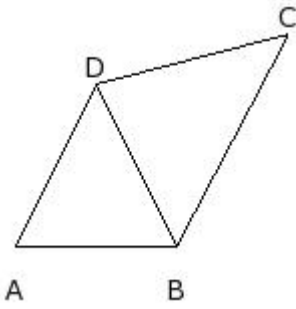
  (i)   group m , 81.32 sq.mts

  (ii) group n , 73.32 sq.mts

  (iii) group n , 76.32 sq.mts

  (iv) group n , 79.32 sq.mts

  (v) group n , 71.32 sq.mts

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11. 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 both his son and daughter could work on the land to produce different crops. If the perimeter of the land is 760.00 mt and one of the diagonals is 120 mt, how much area will each get for their crops?

  (i)   10816.65 sq.mts (ii) 9116.65 sq.mts   (iii) 8616.65 sq.mts

  (iv) 13216.65 sq.mts (v) 11216.65 sq.mts

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12. A rhombus shaped field has green grass for 4 cows to graze. If the perimeter of the field is 520.00 mt and one of the diagonals is 110 mt, how much area of the grass field will each cow be grazing?

  (i)   3299.23 sq.mts (ii) 3239.23 sq.mts (iii) 3419.23 sq.mts

  (iv) 3079.23 sq.mts (v) 3109.23 sq.mts

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13. A triangle and a parallelogram, both have the same base and the same area. If the sides of the triangle are 17 cm, 27 cm and 14 cm, and the parallelogram stands on the base 27 cm, find the height of the parallelogram

  (i)   1.78 cm (ii) 4.78 cm (iii) 3.78 cm

  (iv) 2.78 cm (v) 5.78 cm

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14. A field is in the shape of a trapezium whose parallel sides are 22 mt and 9 mt. The non parallel sides are 27 mt and 17 mt. Find the area of the field.

  (i)   191.16 sq.mts (ii) 224.16 sq.mts (iii) 193.16 sq.mts

  (iv) 208.16 sq.mts (v) 211.16 sq.mts

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15. A floral design on a floor is made up of 25 triangular shaped tiles. The sides of each tile are 26 cm, 22 cm and 10 cm. If the cost of polishing the tiles is ₹3.00 per sq cm, find the total cost to polishing all the tiles.

  (i)   ₹8137.64 (ii) ₹8037.64 (iii) ₹7817.64

  (iv) ₹8067.64 (v) ₹8247.64

Assignment Key

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