

G. N. National Public School, Garhaknath, G.K.P.

Class- IX MATHS Chapter-12 Heron's Formula

Assignment Part-3

- Q.1- Find the area of the quadrilateral ABCD in which BCD is an equilateral triangle, each of whose sides is 26 cm, $AD = 24$ cm and $\angle BAD = 90^\circ$. Also, find the perimeter of the quadrilateral. (Given $\sqrt{3} = 1.73$)
- Q.2- The area of a trapezium is 475 cm^2 and its height is 19 cm. Find the lengths of its two parallel sides if one side is 7 cm greater than the other.
- Q.3- A rhombus-shaped sheet with perimeter 40 cm and one diagonal 12 cm, is painted on both sides at the rate of Rs 5 per cm^2 . Find the cost of painting.
- Q.4- The difference between the semiperimeter and the sides of a $\triangle ABC$ are 8 cm, 7 cm and 5 cm respectively. Find the area of the triangle.
- Q.5- The shape of the cross section of a canal is a trapezium. If the canal is 10 m wide at the top, 6 m wide at the bottom and the area of its cross section is 640 m^2 , find the depth of the canal.
- Q.6- The difference between the lengths of the parallel sides of a trapezium is 8 cm, the perpendicular distance between these sides is 24 cm and the area of the trapezium is 312 cm^2 . Find the length of each of the parallel sides.

CT-12. Heron's Formula Assignment Part-9

Q.7- A ~~parall~~ parallelogram and a square have the same area. If the sides of the square measure 40m and altitude of the parallelogram measures 25m, find the length of the corresponding base of the parallelogram.

Q.8- The area of a rhombus is 480 cm^2 , and one of its diagonals measures 48cm. Find (i) the length of the other diagonal (ii) the length of each of its sides, and (iii) its perimeter.

Q.9. If each side of a triangle is doubled then find the ratio of the area of the new triangle thus formed and the given triangle.

Q.10- The length and breadth of a rectangular park are in the ratio 8:5. A path, 1.5m wide, running all around the ~~out~~ outside of the park has an area of 594 m^2 . Find the dimensions of the park.