

HERON'S FORMULA

1. The area of equilateral triangular children park is $6400\sqrt{3} \text{ m}^2$. Find each side of the park.
2. Find the area of equilateral triangle whose perimeter is 36cm.
3. Find the altitude of a triangle whose area is 540m^2 and base is 30m.
4. The sides of a triangle are 4cm, 5cm and 7cm. Find the area.
5. The area of a triangle is 64cm^2 . One side of the triangle is 8cm. Find the perpendicular distance of the opposite vertex from the given side.
6. The length of sides of a triangle are 10cm, 26cm and 24cm, then find the length of altitude corresponding to the longest side.
7. For two triangles, if the ratio of their bases is 1: 2 and the ratio of corresponding altitudes is also 1:2, then find the ratio of their areas.
8. When the perimeter of an equilateral triangle is 48cm , find its area.
9. An isosceles triangle has perimeter 30cm and the length of each of the equal sides is 12cm. Find the area of the triangle.
- 10 Find the area of a right triangle whose hypotenuse and one of the two remaining sides are of length 13cm and 5cm respectively.
- 11.The base of a triangular field is 2.5 times its height. If the cost of turfing it at Rs. 40 per 100m^2 is Rs. 800, then find its base.
- 12.Find the percentage increase in the area of a triangle if its each side is doubled.

13. The perimeter of a rhombus is 260m and one of its diagonal is 66m. Find the area of the rhombus and the other diagonal.
14. A floral design on a floor is made of 16 tiles which are triangular with sides 26cm, 20cm and 10cm. The tiles are polished at rate of 20 paise per cm^2 . Find the cost of polishing the tiles.
15. ABC is an isosceles triangle whose equal sides, AB and AC are 10 cm each and the base $BC = 8\text{cm}$. AD is drawn perpendicular from A to D and P is a point on AD such that $\angle BPC = 90^\circ$. Find the area of shaded region, also given that triangle BPC is an isosceles triangle.

