

## HERONS FORMULA

1. The sides of a triangle are 35cm, 54cm and 61cm respectively. Find the length of its longest altitude.
2. The base of an isosceles triangle measures 24cm and its area is  $192\text{cm}^2$ . Find its perimeter.
3. Calculate the area of the shaded region.
4. Find the area of the quadrilateral ABCD in which  $AB=9\text{cm}$ ,  $BC=40\text{cm}$ ,  $CD=28\text{cm}$ ,  $DA=15\text{cm}$  and  $\angle B=90^\circ$ .
5. Find the area of parallelogram ABCD in which  $BC=12\text{ cm}$ ,  $CD=17\text{ cm}$ , and  $BD=25\text{cm}$ . also find the length of the altitude AE FROM VERTEX A on the side BC.
6. Reenumade a picture of an aero plane with colored paper as shown in figure. Find the total area of paper used.
7. A field is in the shape of a trapezium whose parallel sides are 25m and 10 m and the nonparallel sides are 14m and 13m. find the area of the field.
8. If each side of a triangle is doubled then find the percentage increase in the area of new triangle thus formed and the given area.
9. The length and breadth of a rectangular park are in ratio 8: 5. A path, 1.5 wide, running all around the outside of the park has an area of  $594\text{m}^2$ . Find the dimensions of the park.
10. The perimeter of an isosceles triangle is 32. The ratio of the equal sides and to its base is 3 :2. find the area of the triangle.