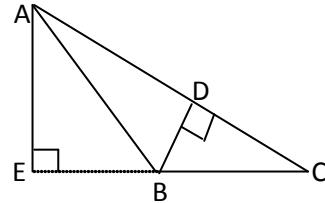


Mathematics – Perimeter and Area

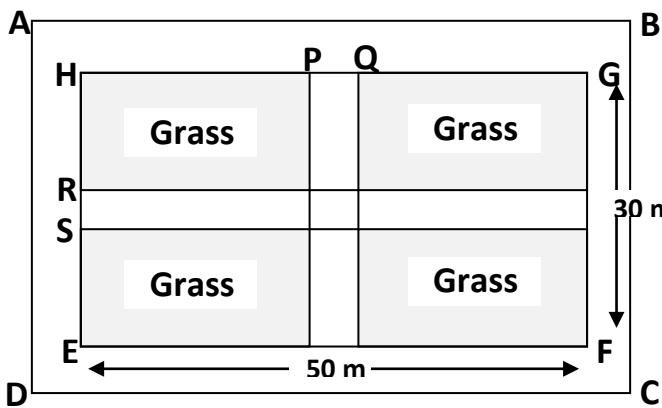
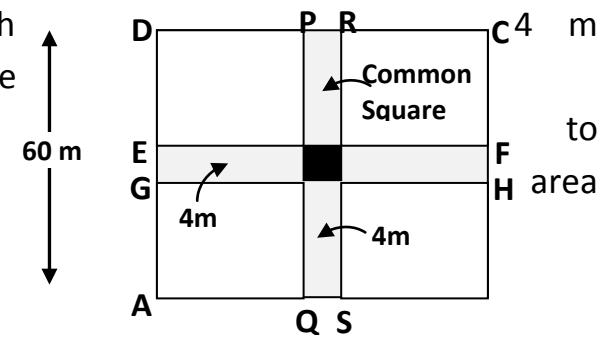
- The length and breadth of a rectangular piece of land are in the ratio 5:2. If the total cost of fencing it at Rs. 12.5 per meter is Rs. 25000, find its length and breadth.
- Find the area of a path 2m wide laid inside along the boundary of a rectangular park of dimension 100m X 60 m. Find the cost of gravelling it at the rate of Rs. 30 per square metre.
- Find the area of a walking 1 m in width laid outside on all sides of a lawn of length 70 m and breadth 50 m.
- A square garden has an area of 2500 sq.m. A part of uniform width of 2.5m runs around it on the inside. Find the cost of laying it at Rs. 25 per sq.m.
- The perimeter of a right triangle is 30cm. Its hypotenuse is 13 cm and base is 5cm. Find the area of the triangle.
- The area of a right triangle is 100cm^2 . If one of the perpendicular legs is 25 cm, find the length of the other.

7. In $\triangle ABC$, $AC=25\text{cm}$, $BC=7\text{cm}$, $AE=10\text{cm}$.
 find (i) the area of $\triangle ABC$
 (ii) DB



- Find the area of an isosceles triangle whose perimeter is 32cm and its base is 12cm.
- The two sides of the parallelogram ABCD are 12cm and 8cm. The height corresponding to base CD is 6cm. Find (i) the area of the parallelogram
 (ii) the height corresponding to base AD.
- Area of a parallelogram is 450cm^2 and its altitude is 20cm. Find the length of the corresponding side of the parallelogram.
- The area of a parallelogram and a square are the same. If the perimeter of the square is 160m and the height of the parallelogram is 20m, find the length of the corresponding base of the parallelogram.
- A field in the form of a parallelogram has one of its diagonals 42m long and the perpendicular distance of this diagonal from either of the outlying vertices is 80 cm. Find the area of the field.

- Find the breadth of the rectangle whose length is 70 cm and perimeter 200 cm.
- The window of a room is 20 m long and 14 m wide. If the carpenter works to put a metallic frame around it which costs Rs. 120 per metre, then how much will the metallic cost?
- The perimeter of a square garden is 444m. Find the area of the garden in hectares.
- A room measures 12 m X 9 m. The floor of the room is to be covered by marble tiles measuring 45 cm by 30 cm. How many tiles are needed?
- Two plots of land have same perimeter. One is a square of side 60 m, while the other is a rectangle whose breadth is 1.5 dam. Which plot has the greater area and by how much?
- A grassy plot is 80 m X 60 m. Two cross paths each wide are constructed at right angles through the centre of the field, such that each path is parallel one of the sides of the rectangle. Find the total used as path.



7. A rectangle 50 m by 30 m has 2 m wide paths joining the middle points of the opposite sides and also a path of the same breadth all round it. The remainder is covered with grass as shown in the figure. Find the cost of laying out of court with grass at Rs. 25 per sq. m and paving the paths at Rs. 2 per sq. m. also, find the total cost.
- A circular piece of thin wire is converted into a square of side 6.25 cm. if there is no loss or gain in its length, find the radius of the circular wire.
- A wire is in the form of a circle of radius 42 cm. It is bent into a square. Find the side of the square. (take $\pi = \frac{22}{7}$)
- The radius of a circular field is 24.5 m. Find the distance run by a boy in making 4 complete turns.
- A race track is in the form of a ring whose inner circumference is 220 m and the outer circumference is 440 m. Find the width of the track.
- Find the distance covered by the wheel of a truck in 100 rotations if the diameter of the wheel is 49 cm.