

# PERIMETER AND AREA OF PLANE FIGURES

# 18

**Q1. Two squares of side 5 cm each are joined side-by-side to form a rectangle. Find the perimeter of the resulting rectangle.**

Answer: \_\_\_\_\_

**Q2. Out of the following tick the one having maximum perimeter:**

- a. A rectangle of length 10 cm and breadth 15 cm
- b. A square of side 20 cm
- c. An equilateral triangle of side 15 cm

**Q3. Match the following figures with their perimeters:**

Square	Sum of the lengths of all three sides
Equilateral triangle	$8 \times$ length of one side
Scalene triangle	$4 \times$ length of one side
A regular octagon	$3 \times$ length of one side

**Q4. The following table shows the length of the sides of a square and rectangle. If both of them (square and rectangle) have the same perimeter, fill in the missing entries in the table.**

Side of square	Length of rectangle	Breadth of rectangle	Perimeter of square and rectangle
6 cm	8 cm	_____	_____
_____ cm	10 cm	5 cm	_____

**Q5. Two wires of length 120 m each was bent to form a square and an equilateral triangle. Find the measure of each side of the square and the triangle.**

Answer: Measure of each side of the square : \_\_\_\_\_ m

Measure of each side of the equilateral triangle : \_\_\_\_\_ m

**Q6. The length and breadth of a rectangle are in the ratio 5:2. If the perimeter of the rectangle is 98 m, find the dimensions of the rectangle.**

Answer: Length of rectangle: \_\_\_\_\_ m

Breadth of rectangle: \_\_\_\_\_ m

**Q7. The perimeter of a rectangular table top is 200 cm. If the length of the table top is 55 cm, find the width and area of the table.**

Answer: Width of the table: \_\_\_\_\_

Area of the table: \_\_\_\_\_

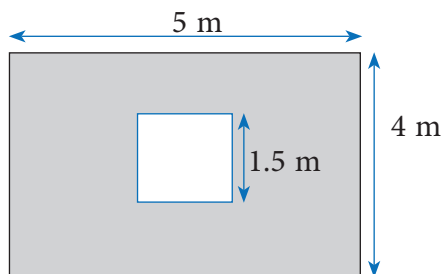
**Q8. The area of a square is  $400 \text{ m}^2$ . If the measure of each side of the square is doubled, find the area of the new bigger square.**

Answer: \_\_\_\_\_

**Q9. The gardener wants to make a square flower bed in the middle of a rectangular garden measuring 5 m by 4 m as shown in the figure below. In the rest of the area he wants to plant ornamental shrubs. If each side of the flower bed is 1.5 m long, find the area of the following:**

a. Area in which he will plants flowers

b. Area in which he will plant ornamental shrubs



Answer:

a. Area in which he will plants flowers : \_\_\_\_\_

b. Area in which he will plant ornamental shrubs : \_\_\_\_\_

**Q10. The side of a square park is 225 m. Find the cost of:**

a. Fencing it at the rate of ₹ 7 per metre

b. Leveling it at the rate of ₹ 12 per  $\text{m}^2$

Answer: Cost of fencing it at the rate of ₹ 7 per metre : \_\_\_\_\_

Cost of leveling it at the rate of ₹ 12 per  $\text{m}^2$  : \_\_\_\_\_

## ANSWERS

1. 30 m

2. (b)

3.

Square	$4 \times$ length of one side
Equilateral triangle	$3 \times$ length of one side
Scalene triangle	Sum of the lengths of all three sides
A regular octagon	$8 \times$ length of one side

4.

Side of square	Length of rectangle	Breadth of rectangle	Perimeter of square and rectangle
6 cm	8 cm	4 cm	24 cm
7.5 cm	10 cm	5 cm	30 cm

5. Measure of each side of the square : 30 m

Measure of each side of the equilateral triangle : 40 m

6. Length of rectangle: 35 m

Breadth of rectangle: 14 m

7. Width of the table: 45 cm

Area of the table:  $2475 \text{ cm}^2$

8.  $1600 \text{ m}^2$

9. a. Area in which he will plants flowers :  $2.25 \text{ m}^2$

b. Area in which he will plant ornamental shrubs :  $17.75 \text{ m}^2$

10. a. ₹6300

b. ₹6,07,500