



# ASSIGNMENT-12



Marks Obtained: \_\_\_\_\_

Student's Name: \_\_\_\_\_ Section: \_\_\_\_\_

Roll Number: \_\_\_\_\_ Date: \_\_\_\_\_

### A. Fill in the blanks

- The area of a square with a perimeter of 36 m is \_\_\_\_\_ sq m.
- If the length of a rectangle is tripled and the width is halved, the new area will be \_\_\_\_\_ times the original area.
- A square and a rectangle have the same area. The square has side 8 cm. If the rectangle has length 16 cm, its width is \_\_\_\_\_ cm.
- The maximum possible area for a rectangle with a perimeter of 28 cm is \_\_\_\_\_ cm<sup>2</sup>.
- Two rectangles have the same perimeter. One has dimensions 6 cm × 4 cm, the other 7 cm × 3 cm. The area of the first is \_\_\_\_\_ cm<sup>2</sup> and the second is \_\_\_\_\_ cm<sup>2</sup>.

### B. State true or false

- If two rectangles have the same perimeter, they must have the same area. \_\_\_\_\_
- If two squares have the same perimeter, they must have the same area. \_\_\_\_\_
- Changing the shape of a figure by changing its perimeter will always change its area. \_\_\_\_\_
- If the area of a square is 289 cm<sup>2</sup>, its perimeter is 68 cm. \_\_\_\_\_
- If the perimeter of a rectangle is 24 cm, its area can be 35 cm<sup>2</sup>. \_\_\_\_\_

### C. Match the following

Column I	Column II
1. Area of a rectangle	(a) 4 × length of a side
2. Perimeter of a square	(b) side × side
3. Area of a square	(c) 3 × length of a side
4. Perimeter of a rectangle	(d) length × breadth
5. Perimeter of an equilateral triangle	(e) 2(length + breadth)

### D. Do as directed

- A rectangular swimming pool measures 30 m in length and 20 m in width. A pathway of uniform width is constructed all around the pool. If the area of just the pathway is 216 m<sup>2</sup>, what is the width of the pathway?
- A wall measures 3 m in height and 5 m in width. Marble tiles, each measuring 30 cm × 25 cm, are used to cover the wall completely. How many tiles are required to cover the wall?