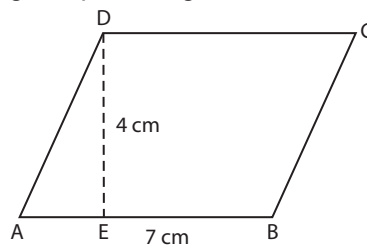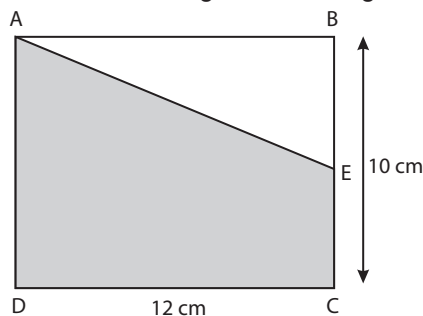# Worksheet

1. Choose the correct option.

   a. The base of a right-angled triangle is 6 units and its height is 9 units, then its area is

      i. 27 sq. units   ii. 54 sq. units   iii. 18 sq. units   iv. 7.5 sq. units

   b. A circle has an area of 154 cm^2. The radius of the circle is

      i. 7 cm   ii. 49 cm   iii. 22 cm   iv. 14 cm

   c. If the area of a square is 324 cm^2, the perimeter of the square is

      i. 18 cm   ii. 72 cm   iii. 36 cm   iv. 108 cm
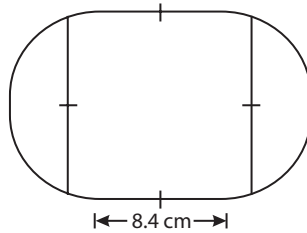
   d. The area of the given parallelogram is

      i. 28 cm^2 ii. 17 cm^2 iii. 22 cm^2 iv. 11 cm^2

   e. If the diagonals of a rhombus are 12 cm and 8 cm, then its area is

      i. 48 cm^2 ii. 20 cm^2 iii. 96 cm^2 iv 40 cm^2

2. Calculate the area and perimeter of the triangles whose sides are:

   a. 17 cm, 10 cm, 21 cm   b. 6 cm, 4.8 cm, 3.6 cm

3. The sides of a triangle are in the ratio 5 : 4 : 3. If the area of the triangle is 216 cm^2, find the dimensions of the triangle and the length of the altitude corresponding to the longest side.

4. Calculate the area of the shaded region of rectangle ABCD, where BE = CE.

5. Find the area and perimeter of the following rectangles.

   a. diagonal = 15 cm, length = 12 cm   b. diagonal = 26 cm, length = 10 cm

6. A rectangular park whose length is 60 m and breadth is 45 m has two crosspaths, each 6 m wide. Find the area of the crosspaths and cost of levelling the paths at ₹12.50 per sq. metre.

7. If the area of a square is 72 cm^2, find the length of its diagonal. Also, find the perimeter of the square.

8. If the length of the diagonals of a rhombus are 24 cm and 18 cm, find the area of the rhombus. Also, find the perimeter of the rhombus.

9. What is the area of a parallelogram whose base measures 8 cm and its corresponding height measures 5 cm?

10. How many times a wheel has to rotate to cover a distance of 66 km, if the radius of the wheel is 35 cm?

11. A wire bent in the form of a square encloses an area of 756.25 cm^2. If the same wire is bent in the form of a circle, then what will be the area of the circle?

12. Find the area of the given figure:

$\leftarrow$ 8.4 cm $\rightarrow$

Answers to Worksheet

1. a. i   b. i   c. ii   d. i   e. i

2. a. 84 cm^2, 48 cm   b. 8.64 cm^2, 14.4 cm

3. 30 cm, 24 cm, 18 cm, 14.4 cm   4. 90 cm^2

5. a. 108 cm^2, 42 cm   b. 240 cm^2, 68 cm

6. 594 m^2, ₹ 7425   7. 12 cm, $24\sqrt{2}$ cm

8. 216 cm^2, 60 cm   9. 40 cm^2 10. 30000

11. 962.5 cm^2 12. 126 cm^2