

CLASS – VII MATHEMATICS – CHAPTER 11

PERIMETER AND AREA

Name: _____

Date: _____

01. A door frame of dimensions **4 m × 5 m** is fixed on the wall of dimension **11 m × 11 m**. Find the total labour charges for painting the wall if the labour charges for painting **1m²** of the wall is Rs **2.50**.

- (a). Rs. 200 (b). Rs. 252.50 (c). Rs. 300 (d). Rs. 350

02. What is the circumference of a circle of diameter **10cm**?

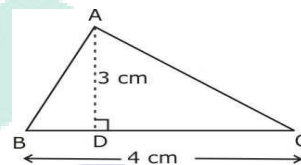
- (a). 30 cm (b). 35 cm (c). 31.4 cm (d). none of these

03. Find the breadth of a rectangular plot of land, if its area is **440 m²** and the length is **22m**.

- (a). 5 m (b). 10 m (c). 15 m (d). 20 m

04. Find the area of following triangle:

- (a). 6 cm² (b). 5 cm² (c). 4 cm² (d). 3 cm²



05. The length and breadth of a rectangular field is **10 cm** and **6 cm** respectively.

Find the perimeter of the field.

- (a). 32 cm (b). 28 cm (c). 24 cm (d). 20 cm

06. A door frame of dimensions **4m × 5m** is fixed on the wall of dimension **11m × 11m**. Find the total labour charges for painting the wall if the labour charges for painting **1m²** of the wall is Rs **2.50**.

- (a). Rs. 200.50 (b). Rs. 252.50 (c). Rs. 300 (d). Rs. 350.50

07. Find the area of a circle of radius **15 cm**.

- (a). 599.5 cm² (b). 695 cm² (c). 706.5 cm² (d). none of these

08. A rectangle's length is **(2x + 1) cm** and its width is **(2x - 1) cm**. If its area is **15 cm²**, find the value of x?

- (a). 2 cm (b). 3 cm (c). 4 cm (d). 5 cm

09. The length and breadth of a rectangular field is **10 cm** and **6 cm** respectively. What will be its area?

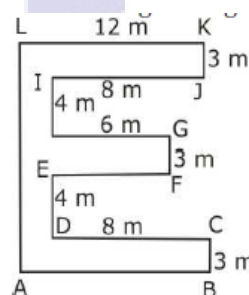
- (a). 50 cm² (b). 60 cm² (c). 70 cm² (d). 80 cm²

10. Find the perimeter of the given figure.

- (a). 35 m (b). 80 m (c). 94 m (d). 86 m

11. If the area of a rectangular plot of land is **440 m²** and the length is **22 m**. Find its perimeter.

- (a). 48 m (b). 60 m (c). 72 m (d). 84 m



12. Write **3/4** in the form of percentage.

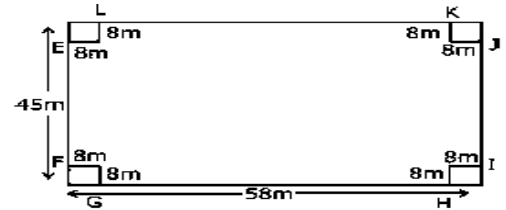
- (a). 100% (b). 75% (c). 50% (d). 25%

13. A rectangular field has dimensions **84 m** by **37 m**. Find the cost of fencing its boundary at the cost of Rs **2.50/m**. What will be the cost of digging the entire field at the cost of Rs **15/m²**.

- (a). Rs 40,620 (b). Rs 66,620 (c). Rs 50,620 (d). Rs 46,620

D CUBE AURA

14. If the area of the rectangle is 105 cm^2 . Its length is $(4x - 5) \text{ cm}$ and breadth is $(2x - 5) \text{ cm}$, find the perimeter?
 (a). 44 cm (b). 55 cm (c). 33 cm (d). 66 cm
15. How many times a wheel of radius 28 cm must rotate to go 352 m ?
 (a). 100 Times (b). 300 Times (c). 200 Times (d). none of these
16. A rectangle has a length of 6 cm and diagonal 10 cm , find the width of the rectangle?
 (a). 8 cm (b). 16 cm (c). 9 cm (d). 12 cm
17. A field has four square corners as shown in the figure. Find the perimeter excluding the square corners.
 (a). 106 m (b). 206 m
 (c). 300 m (d). 405 m



Q01. Fill in the blanks:

- (a). The _____ is the distance around a given two-dimensional object.
- (b). If we cut a square along one of its diagonals, two triangles are obtained. Area of each triangle obtained = _____.
- (c). Perimeter of a regular polygon = _____ \times Length of each side
- (d). The formula to find area of circle _____.
- (e). $1 \text{ m}^2 = \text{_____ cm}^2$
- (f). Area of a square = _____
- (g). $50 \text{ cm}^2 = \text{_____ mm}^2$
- (h). If we cut a parallelogram along one of its diagonals, we obtain two triangles. These triangles are equal in area because _____.
- (i). _____ is a quantity expressing the two-dimensional size of a defined part of a surface, typically a region bounded by a closed curve.
- (j). If we cut a parallelogram along one of its diagonals, we obtain two triangles. These triangles are equal in area because _____.
- (k). One – fourth of the perimeter of a square gives the _____.
- (l). $1 \text{ cm}^2 = \text{_____ m}^2$.
- (m). Area of parallelogram = _____.

Q02. State true or false:

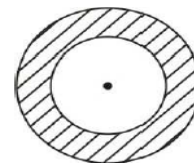
- (a). All triangles equal in area are congruent.
- (b). The distance around a circular region is known as area of that circle.
- (c). Any side of the parallelogram can be chosen as base of the parallelogram.
- (d). The distance around a circular region is known as area of that circle.
- (e). If we cut a rectangle along its one diagonal, we get two triangles. If we cut it along both of its diagonals, we get four triangles.

D CUBE AURA

Q03. A rectangular garden is **65 cm** long and **50 cm** wide. Two cross paths each **2 m** wide are to be constructed parallel to the sides. If these paths pass through the centre of the garden, find the cost of constructing the paths at the rate Rs. **69 per m²**.

Q04. The figure given below, shows two circles with the same centre. The radius of the larger circle is **10 cm** and the radius of the smaller circle is **4 cm**. Find:

- (a). the area of the larger circle,
- (b). the area of the smaller circle,
- (c). the shaded area between the two circles. (Take $\pi = 3.14$)

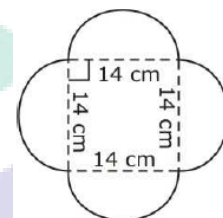


Q05. A wire is in the shape of a square of side **10 cm**. If the wire is rebent into a rectangle of length **12 cm**, find its breadth. Which encloses more area – the square or the rectangle?

Q06. A rectangular garden is **90 m** long and **75 m** broad. A path **5 m** wide is to be built out around it. Find the area of the path.

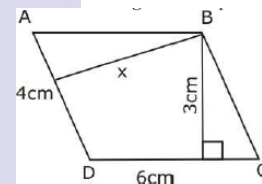
Q07. Find the perimeter of the given shape.

Q08. Anand took a wire of length **44 cm** and bent it into the shape of a circle. Find the radius of that circle. Also, find its area. (a). If the same wire is bent into the shape of a square, what will be the length of each of its sides? Which figure encloses more area the circle or the square?



Q09. The two sides of the parallelogram ABCD are **6 cm** and **4 cm**. The height corresponding to the base CD is **3 cm**, as shown in figure. Find the

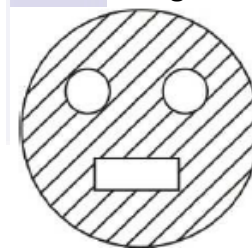
- (a). area of the parallelogram
- (b). the height corresponding to the base AD



Q10. The length & breadth of a rectangle are **23 cm** & **11 cm** respectively. Find the area of the triangles formed by joining one of its diagonals.

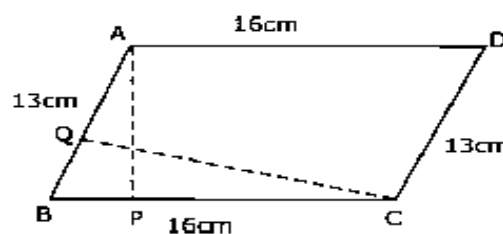
Q11. The area of a square and a rectangle are equal. If the side of the square is **40 cm** and the breadth of the rectangle is **25 cm**, find the length of the rectangle. Also, find the perimeter of the rectangle.

Q12. From a circular card sheet of radius **14 cm**, two circles of radius **3.5 cm** and a rectangle of length **3 cm** and breadth **1 cm** are removed. Find the area of the remaining sheet.



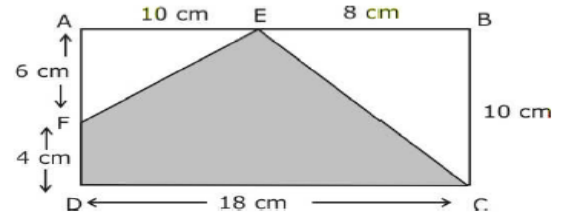
Q13. The side of a square is **4 cm**. Find the area of the triangles formed by joining all of its diagonals.

Q14. The sides of the parallelogram ABCD are **16 cm** and **13 cm**. If AP & CQ are respectively perpendicular to BC and AB; find AP and CQ. The area of parallelogram is **1040 cm²**.

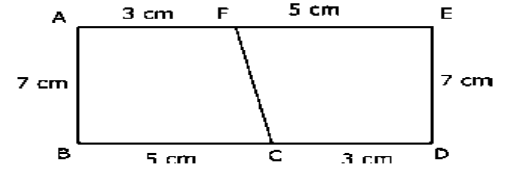


D CUBE AURA

Q15. In the following figure, find the area of shaded portion:



Q16. Find the area of the rectangle and of its congruent parts shown in the figure:



Q17. A rectangular garden is **65cm** long and **50 cm** wide. Two cross paths each **2 m** wide are to be constructed parallel to the sides. If these paths pass through the centre of the garden, find the cost of constructing the paths at the rate Rs **69 per m²**.

