20 PERIMETER AND AREA OF PLANE FIGURES

Q1. Find the measure of each side of a regular hexagon having perimeter 45 cm.

Answer: _____

Q2. Find the perimeter of a square having the following diagonals:

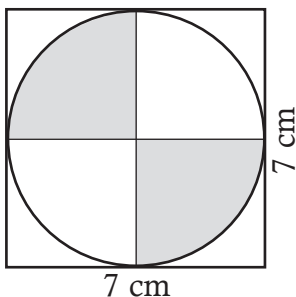| Length of the diagonal	Perimeter of the square
a. $8\sqrt{2}$ cm	_____
b. $64mm$	_____
c. 36 cm	_____

Q3. Raju has to paste pictures of healthy food items on a square chart. He has made a 2.5 cm broad colourful border on all four sides of the chart. If one side of the chart is 30 cm long, find the area left for pasting the pictures.

Answer: _____

Q4. In the figure given below, a circle is inscribed inside a square of side 7 cm. Find the area of the shaded region.

7 cm

7 cm

Area of the shaded region = _____

Q5. The base and height of a parallelogram are in the ratio 2 : 3. If the area of the parallelogram is 2646 sq units, find:

    a.   The base of the parallelogram   = _____

    b.   The height of the parallelogram = _____

Q6. The area of an equilateral triangle XYZ is $400\sqrt{3}$ cm². Find the length of each side of the triangle.

    Answer: _____

Q7. A scalene triangle has sides measuring 56 cm, 60 cm and 52 cm. Find the altitude to the longest side of the triangle.

    Answer: _____

Q8. Choose the correct option:

    If two rhombuses have equal area:

    a.   Sum of their diagonals will be the same

    b.   Product of their diagonals will be the same

    c.   Difference of their diagonals will be the same

    Answer: _____

Q9. A walking track enclosed between two concentric circles is to be paved with tiles. If the radii of the circles are 14 m and 21 m, find the area to be covered with tiles.

    Answer: _____

Q10. A circular shaped wire of diameter 112 cm is bent to form a square. Find the perimeter of the square so formed.

    Perimeter of the square = _____

Answers

1. 7.5 cm
2. a. 32 cm; b. $128\sqrt{2}$ cm; $72\sqrt{2}$ cm
3. 625 cm²
4. 19.25 cm²
5. a. 42 units; b. 63 units
6. 40 cm
7. 44.8 cm
8. (b)
9. 770 m²
10. 352 cm