

Chapter- 14

Perimeter and area

WORKSHEET

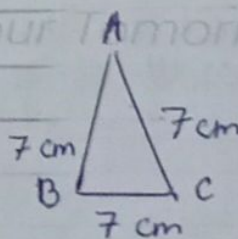
A. FILL IN THE BLANKS.

- The length of the boundary of a closed figure is called its perimeter.
- A square is a figure in which all the sides are equal.
- Rectangle is a closed figure having equal opposite sides.
- Perimeter of a square = 4 x length of one side
- The surface enclosed by a 2-D or plane figure is known as its area.

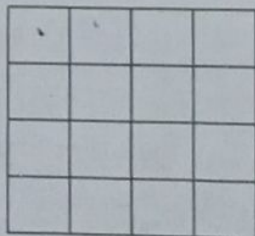
B. DO AS DIRECTED.

- Find the perimeter of a triangle in which all sides are 7 cm.

$$\begin{aligned} \text{Perimeter} &= AB + BC + CA \\ &= 7 + 7 + 7 \\ &= 21 \text{ cm} \end{aligned}$$



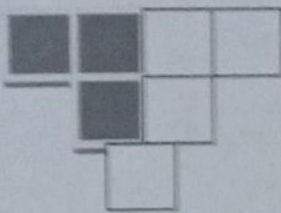
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$$\begin{aligned} \text{Area of one square} &= 1 \text{ cm}^2 \\ \text{Number of square in the figure} &= 16 \\ \therefore \text{Area of the figure} &= 1 \times 16 = 16 \text{ cm}^2 \end{aligned}$$

Find the area of the above figure if each square has an area of 1 sq.cm.

8.



Area of 1 square = 1 cm^2
 \therefore Area of 3 square = $3 \times 1 \text{ cm}^2 = 3 \text{ cm}^2$

Find the area of the shaded region if each square has an area of 1 sq.cm.

9. Find the perimeter of the rectangle whose length is 7 cm and breadth is 4 cm.

Length = 7 cm, breadth = 4 cm
 perimeter of a rectangle = $2 \times (\text{length} + \text{breadth})$
 $= 2 \times (7 + 4)$
 $= 22 \text{ cm}$

10. Find the perimeter of the square whose side is 13 m.

Length of one side = 13 m
 Perimeter of a square = $4 \times \text{length of one side}$
 $= 4 \times 13 \text{ m}$
 $= 52 \text{ m}$

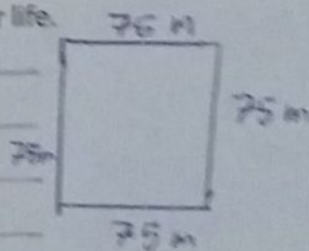
C. SOLVE THE FOLLOWING QUESTIONS.

11. The length of a floor is 70 m and its breadth is 40 m. Find the perimeter of the floor.

Length of the floor = 70 m
 Breadth of the floor = 40 m
 \therefore Perimeter of the floor = $2 \times (\text{length} + \text{breadth})$
 $= 2 \times (70 + 40)$
 $= 2 \times 110 \text{ m}$
 $= 220 \text{ m}$

12. A square shaped garden is of length 75 m. How much wire will be required for fencing around it thrice? Also write the importance of plant in our life.

Length of square shaped garden = 75 m
 perimeter of the square garden =
 $= 4 \times \text{length of one side}$
 $= 4 \times 75$
 $= 300 \text{ m}$



If wire will fetch thrice around its $= 300 \times 3 = 900\text{m}$
 $\therefore 900\text{m}$ of wire is required for fencing around the garden.

Plants maintain the atmosphere. They produce oxygen and absorb carbon dioxide. Plants provide us with fire wood, food, timber, cloth, medicines etc.

13. A cloth is 8 m long and 5 m wide. If Leena wants to lace it around, how much lace is required?

$$\text{Length of the cloth} = 8\text{ m}$$

$$\text{Breadth of the cloth} = 5\text{ m}$$

$$\begin{aligned} \text{Perimeter of the cloth is} &= 2 \times (\text{length} + \text{breadth}) \\ &= 2 \times (8 + 5) \\ &= 2 \times 13 = 26\text{ m} \end{aligned}$$

\therefore Leena needs 26 m lace to lace it around.

14. Write the formulas to find the perimeter of square, rectangle and triangle.

$$\text{Perimeter of square} = 4 \times \text{length of one side}$$

$$\text{Perimeter of rectangle} = 2 \times (\text{length} + \text{breadth})$$

$$\text{Perimeter of triangle} = \text{Sum of lengths of all 3 sides}$$

EDUCATIONAL GROUP

Changing your Tomorrow

15. A triangular field has its sides of length 130 m, 110 m and 90 m respectively.

Calculate the distance travelled by a woman if he goes around the field twice.

$$\text{Length of triangular field} = 130\text{ m}, 110\text{ m and } 90\text{ m}$$

$$\begin{aligned} \text{Perimeter of the triangular field} &= 130\text{ m} + 110\text{ m} + 90\text{ m} \\ &= 330\text{ m} \end{aligned}$$

$$\text{If a woman cover twice} = 330\text{ m} \times 2 = 660\text{ m}$$

\therefore So, a woman covers 660 m around the field twice.