

Chapter- 14

Perimeter and area

1. The length of the boundary of a closed figure is called its perimeter.

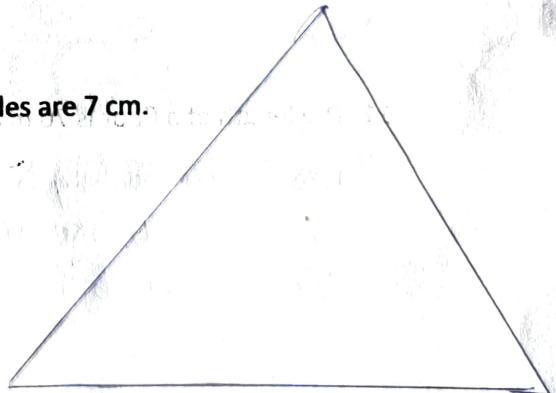
2. A square is a figure in which all the sides are equal.

3. Rectangle is a closed figure having equal opposite sides.

4. Perimeter of a square = 4 x length of one side

5. The surface enclosed by a 2-D or plane figure is known as its Area.

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

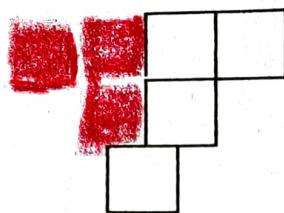


7.

Area: 16 cm²

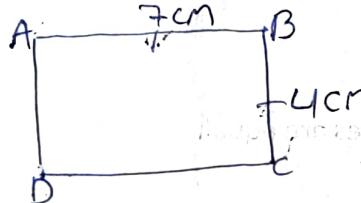
Find the area of the above figure if each square has an area of 1 sq.cm.

8.

Area: 3 cm sq

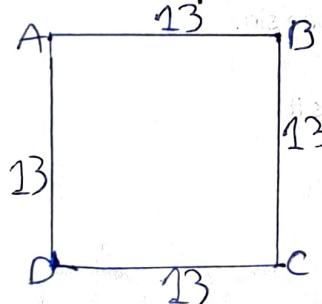
Find the area of the shaded region if each square has an area of 1 sq.cm.

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



$$\begin{aligned}
 \text{perimeter of the rectangle} &= 2 \times (L + B) \\
 &= AB + BC + CD + DA \\
 &= AB + AB + BC + BC \\
 &= 2AB + 2BC \\
 &= 2(AB + BC) \\
 &= 2 \times 11 \\
 &= 22 \text{ cm}
 \end{aligned}$$

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



$$\begin{aligned}
 \text{perimeter of the square} &= 4 \times \text{Length of one side} \\
 &= 4 \times 13 \\
 &= 52 \text{ cm}
 \end{aligned}$$

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

The Floor of length is 70

The Floor of breadth is 40

$$\begin{aligned}
 \text{perimeter of floor} &= 2 \times (L + B) \\
 &= 2 \times (70 + 40) \\
 &= 2 \times 110 \\
 &= 220 \text{ cm of the floor.}
 \end{aligned}$$

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.

The garden of square side = 75 m

Fencing around it thrice = 3×75

So, required wire is = 225 m

Importance of plant in our life is they give us oxygen for live life.

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

A cloth long $2s = 8 \text{ m}$

A cloth wide $2s = 5 \text{ m}$

Required to cloth $= 2 \times (L + w)$

$$= 2 \times (8 + 5)$$

$$= 2 \times 13 = 26 \text{ m}$$

So, Leena required lace $2s = 26 \text{ m}$

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

1. perimeter of square $= 4 \times \text{length of one side}$

2. perimeter of rectangle $= 2 \times (\text{Length} + \text{Breadth})$

3. perimeter of triangle $= 3 \times \text{sum of Length}$

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.

Triangular of field $= 3 \times \text{sum of length}$
 $= 3 \times (130 + 110 + 90)$
 $= 3 \times 330$
 $= 990 \text{ m}$

Calculate the distance around the field twice

$$= 990 \div 2$$

$$= 495 \text{ m}$$

So, a woman calculate the distance travelled by the field twice is 495 m