



पुर्णमा International School
Shree Swaminarayan Gurukul, Zundal

Grade - V
Maths
Specimen
copy
Year 21-22

INDEX

Month	Lesson No.	Title	Pages
April	1	The Fish Tale	1 to 15
May & June	2	Shapes and Angles	16 to 33
June	3	How Many Squares?	34 to 49
July	4	Parts and Wholes	50 to 70
July	5	Does it Look the Same?	71 to 86
August	6	Be My Multiple, I'll be Your Factor	87 to 98
August	7	Can You See the Pattern?	99 to 111

Chapter 3

How Many Squares?

How Many Squares in Me?

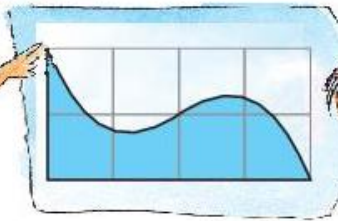
What is the area of this triangle?



The triangle is half the rectangle of area 2 square cm. So its area is _____ square cm.



Is this shape half of the big rectangle?

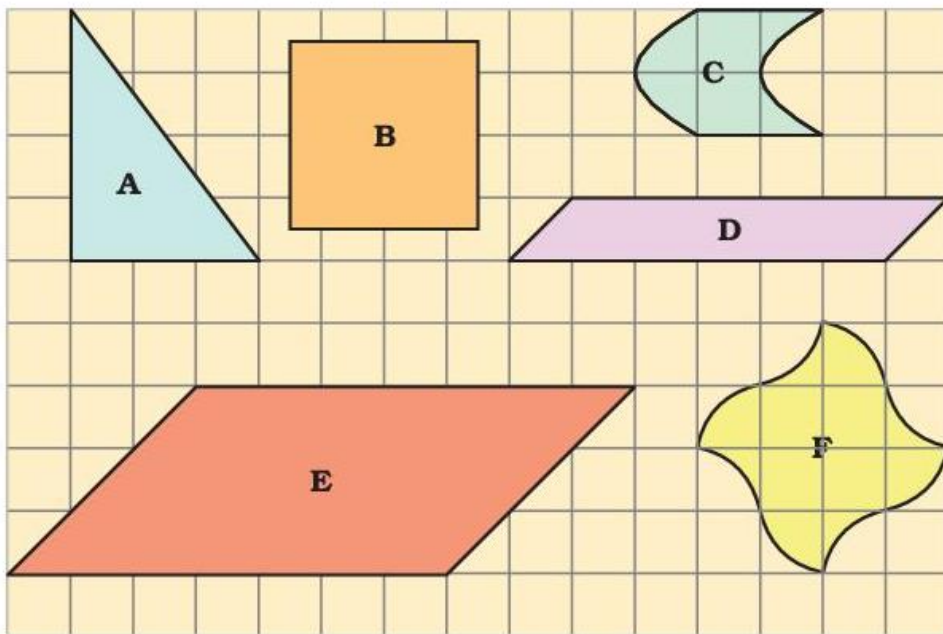


Hmmm..... So its area is _____ square cm.



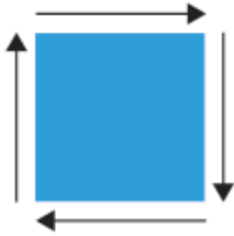
Key point to remember

- Introduction
- Find the perimeter
 - i. Rectangle
 - ii. Square
- Find the area
 - i. Rectangle
 - ii. Square
- Word problem sums.
- Activity



❖ **Introduction:**

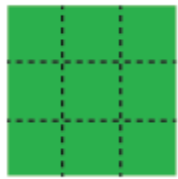
- **Perimeter** – The distance around the edge of a shape.



- Perimeter of rectangle = $2(\text{length} + \text{breadth}) = 2(l + b)$
- Perimeter of square = $4 \times \text{length} = 4 \times L$

OR
 $4 \times \text{Sides}$

- **Area** – The region enclosed between boundaries of a figure.



- Area of rectangle = $\text{Length} \times \text{Breadth}$
- Area of square = $\text{length} \times \text{Length}$

OR
 $\text{Side} \times \text{Side}$

❖ **Find the perimeter.**

1. Length = 14 cm , breadth = 12 cm

Solve: perimeter of rectangle = $2(l + b)$

$$= 2(14 + 12)$$

$$= 2(26)$$

$$= 52 \text{ cm}$$

2. Length = 15 cm , Breadth = 13 cm

Solve: perimeter of rectangle = $2(l + b)$

$$= 2(15 + 13)$$

$$= 2(28)$$
$$= 56 \text{ cm}$$

3. Length = 13cm

Solve: perimeter of square = $4 \times \text{sides}$
 $= 4 \times 13 \text{ cm}$
 $= 52 \text{ cm.}$

4. Sides = 25 cm

Solve: perimeter of square = $4 \times \text{sides}$
 $= 4 \times 25 \text{ cm}$
 $= 100 \text{ cm.}$

5. Length = 30 cm, Breadth = 20 cm.

6. Sides = 18 cm

❖ **Find the area:**

a) Length = 5 cm, breadth = 3 cm

Solve: area of rectangle = $l \times b$
 $= 5 \text{ cm} \times 3 \text{ cm}$
 $= 15 \text{ cm}^2$

b) L = 10 cm, B = 8 cm.

Solve: area of rectangle = $l \times b$
 $= 10 \text{ cm} \times 8 \text{ cm}$
 $= 80 \text{ cm}^2$

c) Sides = 14 cm.

Solve: area of square = $l \times l$
 $= 14 \text{ cm} \times 14 \text{ cm}$
 $= 196 \text{ cm}^2$

d) Length = 16 cm.

Solve: area of square = $l \times l$
 $= 16 \text{ cm} \times 16 \text{ cm}$
 $= 256 \text{ cm}^2$

e) Length = 20 cm, Breadth = 15 cm.

f) Length = 21 cm.

❖ **Word problem**

1) A classroom black board is 75 m long and 12 m wide. Find the perimeter of black board?

Solve: length = 75 m, breadth = 12 m

$$\text{Perimeter of a board} = 2(l + b)$$

$$= 2(75 \text{ m} + 12 \text{ m})$$

$$= 2(87 \text{ m})$$

$$= 174 \text{ m.}$$

- 2) A carpet is 75 cm long and 38 cm wide. Find its area and perimeter.

Solve: length = 75 cm, breadth = 38 cm

$$\text{Perimeter of carpet} = 2(l + b)$$

$$= 2(75 \text{ cm} + 38 \text{ cm})$$

$$= 2(113 \text{ cm})$$

$$= 226 \text{ cm}$$

$$\text{Area of carpet} = l \times b$$

$$= 75 \text{ cm} \times 38 \text{ cm}$$

$$= 2850 \text{ cm}^2.$$

- 3) Find the area of a square field whose side is 67 m.

Solve: area of square = $l \times l$

$$= 67 \text{ m} \times 67 \text{ m}$$

$$= 4489 \text{ m}^2$$

- 4) The side of a square hall is 40 m. Find its area and also the cost of tiling it at rate of Rs 6.30 per square metre.

Solve: Side of the square hall = 40 m

$$\text{Area of square} = \text{Side} \times \text{Side}$$

$$= 40 \text{ m} \times 40 \text{ m}$$

$$= 1600 \text{ m}^2$$

$$\text{Cost of tiling the hall} = 1600 \text{ sq. m} \times \text{Rs } 6.30$$

$$= \text{Rs } 10080.00$$

Thus, the cost of tiling is Rs 10080.

- 5) If breadth of a rectangular plot is 10 m and its length is three times its breadth. Find the perimeter of rectangular plot.

Solve: We know, Breadth of rectangular plot = 10 m

$$\text{Length of the plot} = 3 \times 10 \text{ m} = 30 \text{ m (given)}$$

$$\text{So, perimeter of the plot} = 2(\text{length} + \text{breadth})$$

$$= 2(30 \text{ m} + 10 \text{ m})$$

$$= 2(40 \text{ m})$$

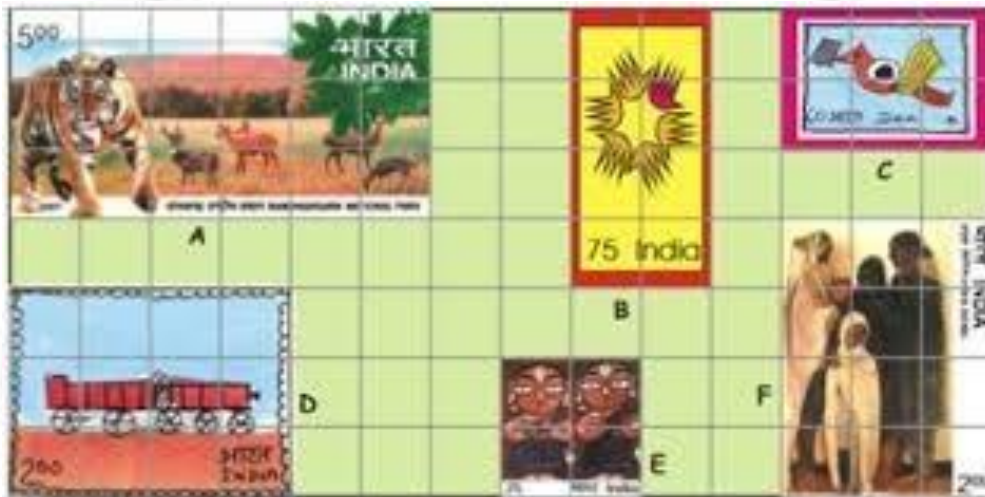
$$= 80 \text{ m.}$$

6) Find the perimeter of a square field. If the length of the square field is 49 m.

Solve: perimeter of square = $4 \times L$
= 4×49 m
= 196 m.

Activity

- ❖ Draw or paste square (1 cm) grid and paste any 4 stamp in it.
(for example text book page no: 35)



यु.ना.