SNBP International & Senior Secondary School Chikhali, Pune.
Affiliation No. 1130703
Academic session 2024-25 Grade - IV
NOTES - PT 3
Subject: MATHS

Prepared by:
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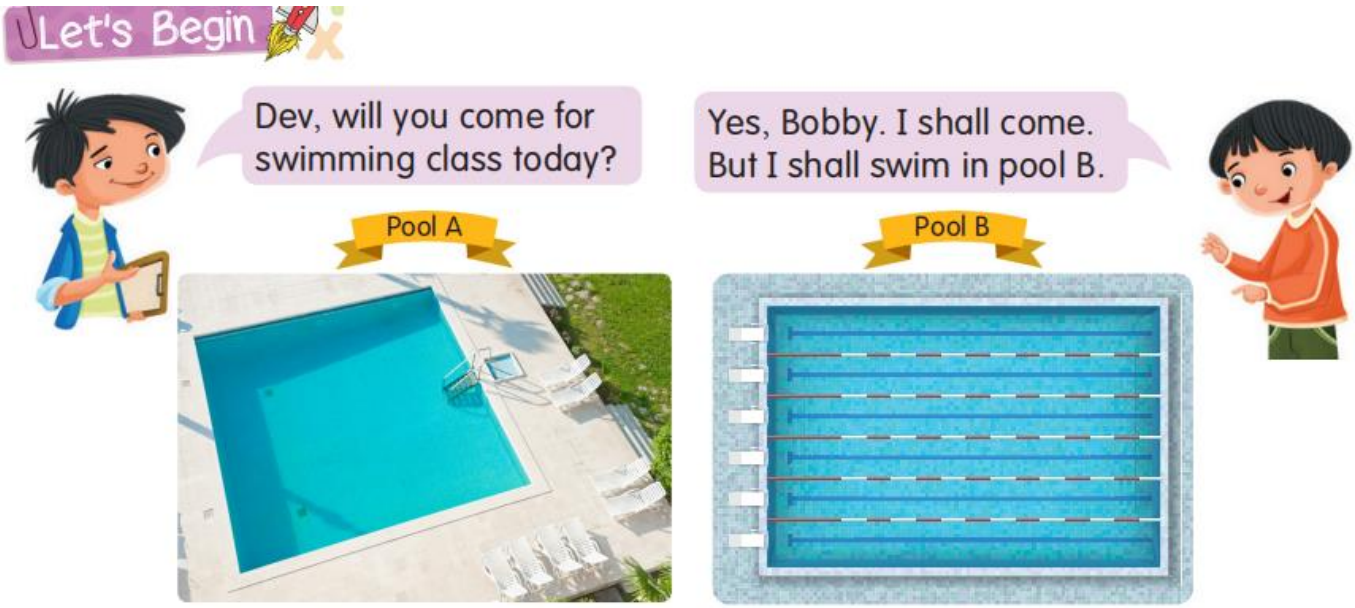
LESSON – 8 Perimeter and Area

Pre activity – Lets Begin from T.B. (Pg. No. 136)



1 Observe the pictures, and answer the following questions.

a Name the shape of Pool A. Square

b Name the shape of Pool B. Rectangle

c How many sides does pool B has? 4

d Are all the sides of pool B equal? No

2 Draw a swimming pool that is irregular in shape in the space provided.

TB Page no. 138

Concrete Stage

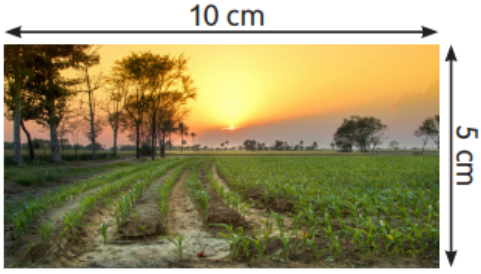
Use a thread or a ruler to work out the perimeter.

Hintometer: Using a ruler is not always possible to measure longer lengths. In such a case, we can use a thread to measure the desired length and then measure the thread using a ruler.

a Chessboard b Pencil box c Notebook

Pictorial Stage

1 **Look at the pictures, and answer the following questions.**



a Rumy wants to paste golden lace around the given picture. Calculate the length of the lace she would need. 30 cm

b Find out the length of the thread needed to tie around the star.

Hint: All the sides are equal.

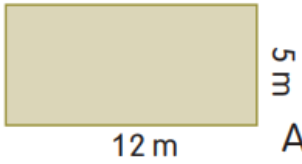
30 cm

2 **Sam wants to put a wired fence around his triangular flower bed with equal sides. Find the perimeter of the flower bed.** 12 m

Abstract Stage

1 **Find the perimeter of the given square and rectangle.**

a



Answer: 34 cm

b

Answer: 32 cm

2 **Look at the figures. Answer the following questions.**

a The perimeter of Figure A is 36 cm.

b The perimeter of Figure B is 40 cm.

c The perimeter of Figure A is lesser than the perimeter of Figure B.

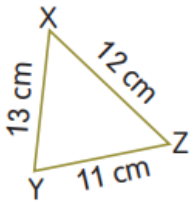


Figure A

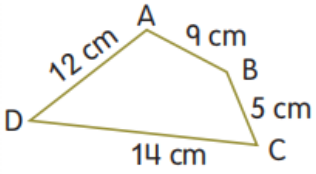


Figure B

3 **Arun goes for the morning walk in a park. The length and width of the park are 50 m and 30 m respectively. He walks around the park three times. How much distance does he cover?**

Answer: 480 m

Worksheet 8.1

Solution:

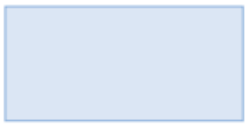
Length of the park = 50 m
Width of the park = 30 m
We know that perimeter = 2(Length + Width)
So, the perimeter of the park = 2(50 + 30)m
= 160 m
He walks around the park 3 times
So, the distance he covered = 3 × 160 =480 m.

(TB Page no. 140)

Concrete Stage

Draw the following shapes with the given dimensions on the 'Geoboard'.
Use unit squares to work out its area.

a



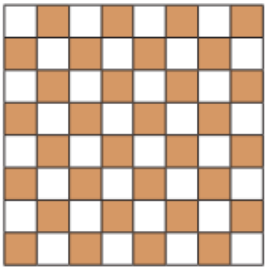
b

Answer: Answer may vary.

Pictorial Stage

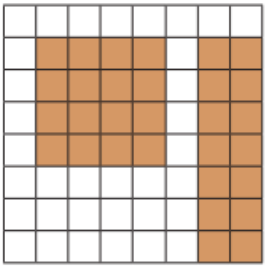
1 Find the area of the shaded parts of the given boards.
(Consider 1 shaded square as 1 square unit)

a



32

b



30

2 Tick the shape that has bigger area.

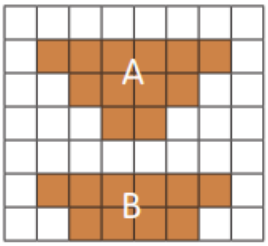
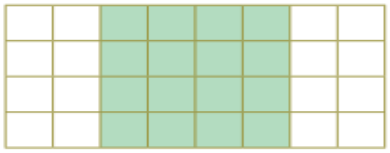


Figure A ✓

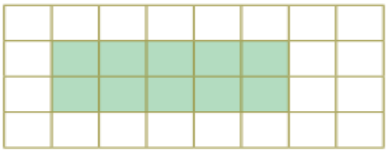
Figure B

Abstract Stage

Draw a square and a rectangle on the given grids. Find their areas.

a 

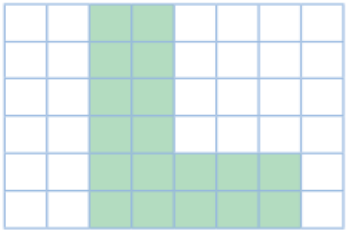
$4 \times 4 = 16$

b 

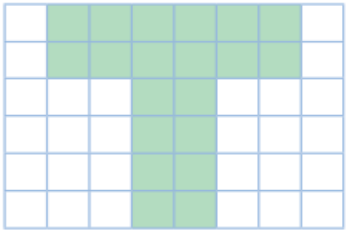
$5 \times 2 = 10$

Concrete Stage

Draw the shapes T and L on the grids and find their areas.

a 

$8 + 10 = 18$ sq.

b 

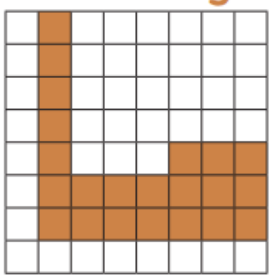
$12 + 8 = 20$ sq.

Maths Fact: Perimeter is expressed in units. Area is expressed in sq. units.

(TB PAGE No. 142)

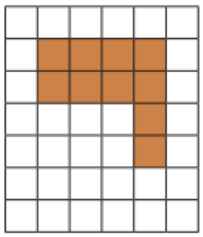
Pictorial Stage

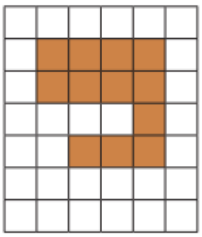
1 **Observe two rectangles and a square on the grid to find the area of the combined figure.**



Answer: 22

2 **Which figure has bigger area?**

a 

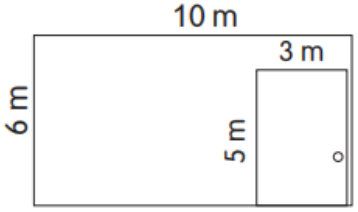
b 

Answer: (b) is bigger area

Worksheet 8.2

Abstract Stage

1 **Gaurav wants to paint a wall and a door, what shape does the wall and the door resemble. Calculate the areas, and colour the larger area in pink and smaller area in brown.**



Solution:

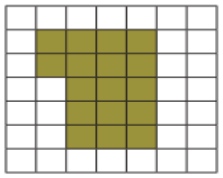
The shape of wall and door are Rectangle.

Area of wall = length × width = 10m × 6m = 60 m^2 (pink)

Area of door = length × width = 5m × 3m = 15 m^2 (brown)

2 **Mitra spread a carpet on a floor. Find the area of the floor which is not covered by the carpet?**

Answer: 32 sq.



Solution:

Area of floor = 7 × 7 = 49 square units

Area of carpet = (3 × 5) + 2 = 15 + 2 =17 square units

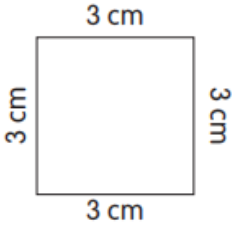
So, Area of floor not covered by carpet = 49 - 17 = 32 square units

(TB Page No. 143)

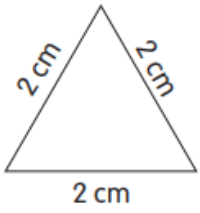
Blooming Questions

1 **Match each shape with its perimeter.**

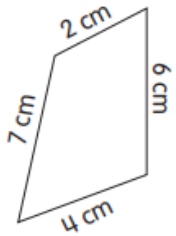
a



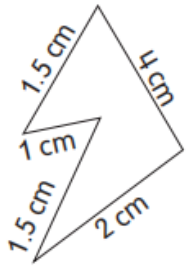
b

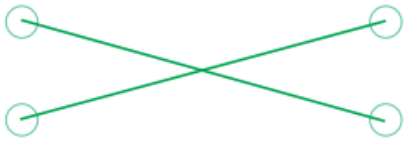


c

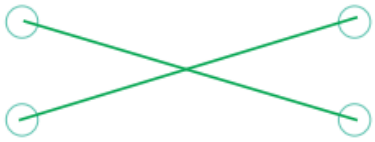


d



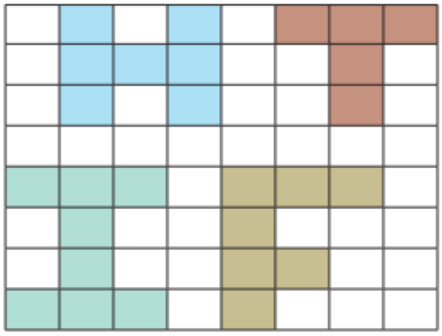


i. 6 cm ii. 12 cm



iii. 10 cm iv. 19 cm

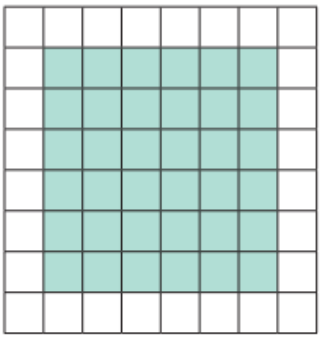
2 **Find the areas of the following letters.**



H	7 sq. units
T	5 sq. units
I	8 sq. units
F	7 sq. units

3 **Mithran and Pavan cleaned the floor. Observe the figure, and find the area cleaned by Mithran and Pavan.**

Answer: 36 unit sq.

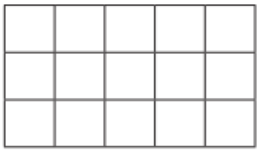
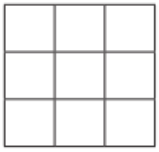


Solution:

Area cleaned by Mithran and Pavan = 6 × 6 = 36 square units.

Mental Maths

1 Complete the table, and find the areas of the figures.

Figure	Length	Width	Area
	5	3	15
	6	2	12
	3	3	9

2 Find the area and the perimeter of the following.

a) length = 12 cm; width = 10 cm
A = 120 cm, P = 44 cm

b) length = 19 m; width = 8 m
A = 152 m, P = 54 cm

c) length = 100 cm; width = 50 cm
A = 5000, P = 300 cm

d) length = 25 cm; width = 4 cm
A = 100, P = 58 cm

Post Activity:

Draw a rectangle that have an area of 48 sq. cm.

Draw a square that have an area of 36 sq. cm.

Draw a rectangle that have a perimeter of 20 cm.

Draw a square that have a perimeter of 80 cm.