# NCERT SOLUTIONS

## CLASS - 4th

Q1 I need a fence around my field. How much wire should I buy?

Answer. The length of the wire required for fencing the field is equal to the boundary of the field.

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Q2 Rahmat needs to find the length of the boundary of the field. Can you find it from this picture? See the length of each side written near it

Answer. Yes, I can find its boundary. It is equal to 21m + 15m + 9m + 9m = 54m of the field.

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Q3 How much wire did Rahmat give Ganpat?

Answer. Rahmat gave Ganpat a wire of length 70m – 54 m = 16m.

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Q4 How long is the boundary of Ganpat's field?

Answer. Boundary of the Ganpat's field = 18m + 9m + 15m + 15m + 9m = 66 metres.

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Q5 How much wire will Ganpat need for his field?
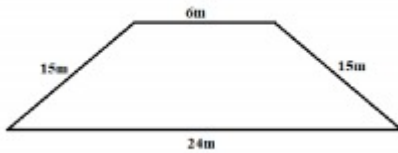
Answer. Ganpat's total requirement of wire = 66 metres
Length of wire given by Rahmat = 16 metres
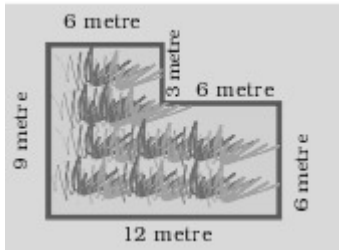Therefore, the length of more wire needed by Ganpat = (66-16) = 50 metres.

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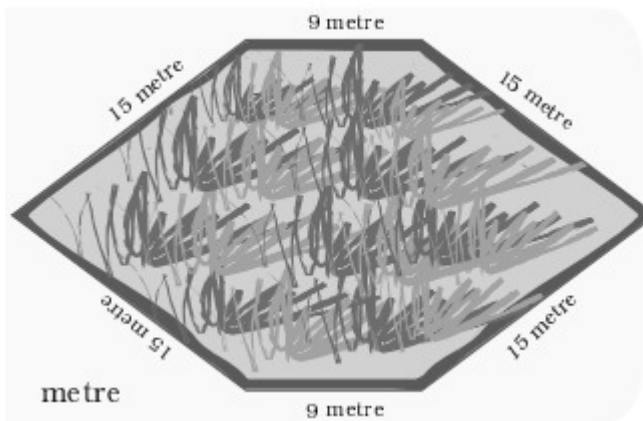Q1 Here is the picture of some more fields. Find out which one has the biggest
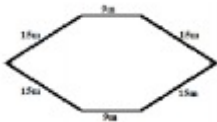Boundary?
Boundary = _____ metre

Boundary = _____ metre



Boundary = _____ metre



Boundary = _____ metre



Answer. (a) Boundary = (24 + 15 + 6 + 15) metres= 60 metres
(b) Boundary = (12 + 6 +6 + 3 +6 + 9) metres = 42 metres.
(c) Boundary = (15 + 12 + 9) metres = 36 metres.
(d) Boundary = (9 + 15 + 15 + 9 + 15 + 15) metres = 78 metres.

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Q2 Chandu's father is called the 'young old man' in his village. At 70 years of age, he is fullyfit. Do you know his secret? He goes for a walk around the field every morning. Every day he takes four rounds of Chandu's field.
What is the total distance he covers?

Answer. Boundary of Chandu's field = 100 m + 150 m + 100 m + 150 m = 500m.
Total Distance covered by Chandu's father = 4 Boundary of Chandu's field
= 4 500m = 2000 m = 2 km.

Q3 Look at the picture of the tablecloth and tell how much is used for one tablecloth?
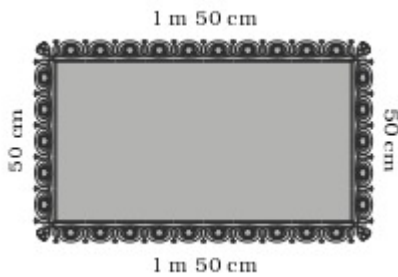


Answer. Length of lace = 2 (1m 50 cm + 50 cm) = 2 2m = 4m.

Q4 How much lace will be used in 3 such table clothes? How much lace will be left in the roll?

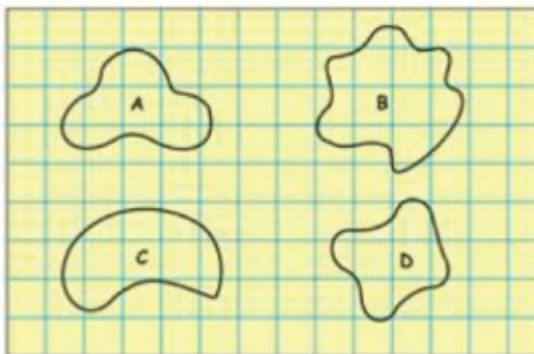Answer. Lace used for one tablecloth = 1m 50 cm + 50 cm + 1m 50 cm + 50 cm = 4 metres
Lace used for 3 such tablecloths = 3 x 4 Lace used for on one tablecloth
3 x 4 Metres = 12 metres.
Lace left in the roll = Total Lace – Lace used = 100m – 12m = 88m.

Q1 Find out the length of the boundary of these shapes. (Hint :– You can use a thread)



Answer. To find the length of the boundary, take a long piece of thread and carefully place it along the boundary of the shape. Cut out the exact length of the thread needed for covering the shape, starting from one point and coming back to the same point. On measuring the length of this thread, we obtain the length of this thread, we obtain boundary of the shape. repeat the process for each shape.

Q2 Now count the square and find out:
(a) How many squares are there in each shape?

(b) Which shape covers the least number of squares?
(c) Which shape covers the most number of squares?

Answer. (a) The number of complete squares in shape A is 1, in shape B is 2, in shape C is 3 and Shape D is 2.
(b) The least number of complete squares are in shape A.
(c) Shape C has the most number of complete squares.

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Q3 Take a 20 centimetre long thread. Make different shapes by joining the ends. Place on the squared sheet on the next page. Find out:
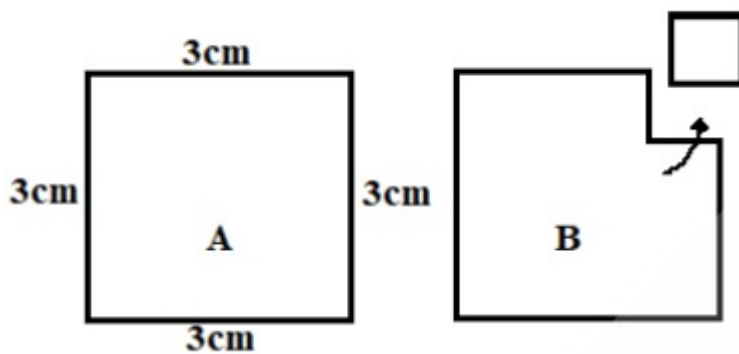(a) How many squares are there in each shape?
(b) Which is the biggest shape?
(c) Which is the smallest shape?
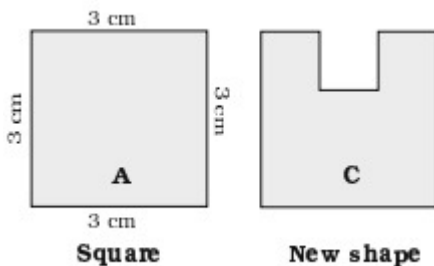(d) How long is the boundary of each shape?

Answer. DIY

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Q1 A square has a boundary of 12 cm.
(a) From the corner of this square, a small square of side 1 cm is cut off. Will the The Boundary of B be less or more? Find its length.



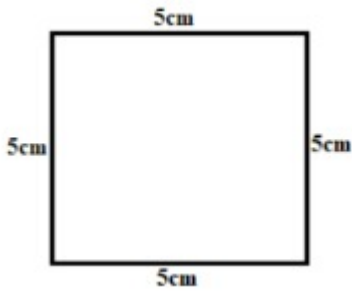(b) If you cut 1 cm square to get shape C what will be the length of the boundary of C?



Answer. (a) Boundary of B = 3 cm + 2 cm + 1 cm + 2 cm +3 cm = 12 cm
Since the boundary of A is also 12 cm.
So, the boundary of B is neither less nor more than that of A. But their boundaries are equal

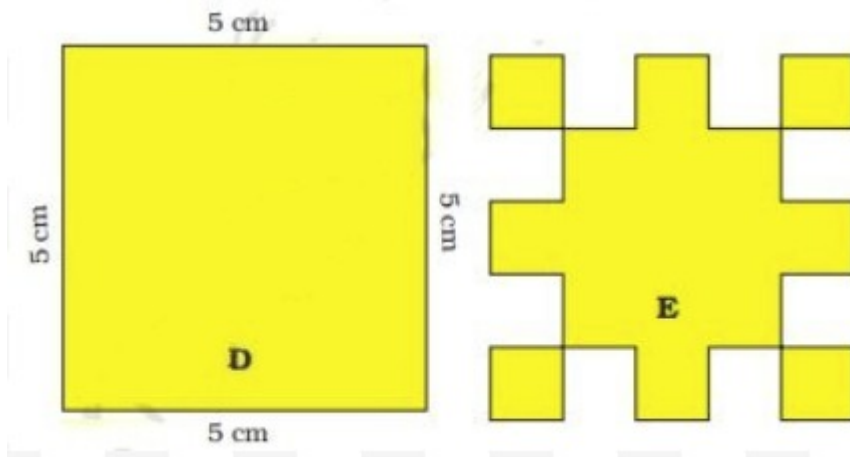(b) Boundary of C = 3cm + 3cm + 1cm + 1cm + 1 cm +1cm + 1cm + 3 cm = 14 cm.


5cm
5cm
5cm
5cm

Length of the boundary of square D = 5cm + 5cm + 5cm + 5cm = 20cm

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Q2 a) Find the length of the boundary of square D.
b) 8 squares of side 1 cm are cut out of the square D. Now it looks like shape E. What is the length of the boundary of shape E ?



(c) The boundary of this square (1cm) is ___ + ___ + ___ + ___.
Can we also say that the boundary is 4 × 1 cm?

Answer. (a) The boundary of shape D = 5 cm + 5 cm + 5 cm + 5 cm = 20 cm
(b) There are 21 edges measuring 1 cm of shape 'E'.
Hence, the boundary of shape 'E' = 1 cm x 21 = 21 cm
(c) The boundary of this square (1cm) is 1cm + 1cm+ 1cm + 1cm = 4cm.
Yes, we can also say that the boundary is 4 x 1 cm.

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Q3 A hockey field is 91 metres 40 cm and 55 metres wide. How long is the boundary of the field?

Answer. Length of the boundary of a hockey field = 91m + 40cm +55m + 91m 40 cm +55m
= 292 m 80 cm

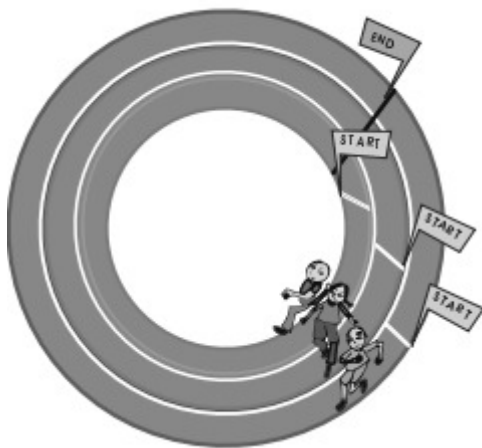Page : 156 , Block Name : Practice Time

Q4 Usha and Valsamma are running a race. Usha is running on the inner circle. Valsamma is running on the outer circle. Valsamma runs after than Usha. But still loses The race. Can you guess why?



Answer. Since inner boundary is smaller than the outer boundary and as such Valsamma has to Run for more distance, therefore, she loses the race.

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Q5 Have you seen any race where runners start from different places – like in this Picture? Guess why?



Answer. In order to make their running distances equal.

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Q1 How will Neetu find out if the two gardens are equally big?

Answer. To find out if the two gardens are equally big:
Let us cover each garden with cardboards of the same size without overlapping. We see that the same number of cardboards cover each garden. Therefore, we can say that the two gardens are

equally big.

Page : 157 , Block Name : School Garden

Q1 Look at the table in your classroom. Guess how many MathMagic books you can place on it.
(Remember — The books should not overlap. Do not leave gaps between the books.)
Write your guess here. _____
Now check if your guess was right. How many books could you place? _____
What is the difference between your guess and the actual number of books? _____

Answer. DIY

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Q2 Now look for another table.
a) Is this table bigger than the last table? Yes/No
b) Make a guess how many Math-Magic books can be kept on this table. _____
c) Check if your guess was correct. How many Math-Magic books could you keep? _____
d) The difference between the sizes of the two tables is _____ books

Answer. DIY

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Q3 a) How many Math-Magic books can be covered with one sheet of newspaper?
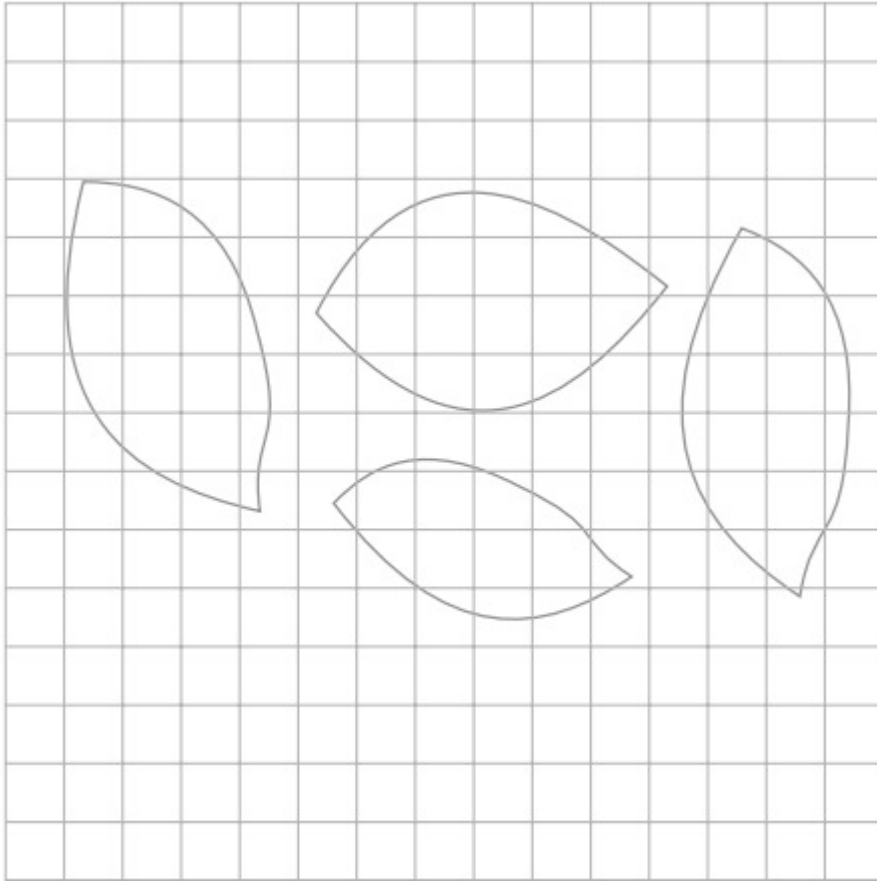b) Try covering your Math-Magic book with half a sheet of newspaper.
c) Can you cover your book with a smaller sheet?
d) Find the smallest sheet which can cover your book. Check if your friend used a smaller sheet than you did.

Answer. DIY

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Q4 (a) Which is the biggest leaf in this picture?

(b) Collect some leaves from the garden. Place each of them here on this squared sheet. Trace out their edges and check how many squares there are in each leaf.
(c) Which is the biggest leaf?
(d) Which is the smallest leaf?

Answer. (a) The leaf in the middle from the top is the biggest leaf.
(b) DIY
(c) DIY
(d) DIY

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Q5 (a) How many small squares of size 1 cm are there in this big green square?
(b) Can you think of a faster way to know the total number of Small Square Without Counting each ?

Answer. (a) There are 36 small squares of size 1 cm in the big green square.
(b) Yes, there is a faster way to find the total number of Small Square. Just find = 6 x 6 = 36.

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Q6 Guess how many squares of one centimeter can fill this rectangle? Checking your guess by completing the grid.
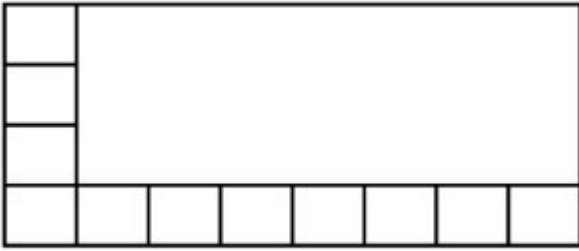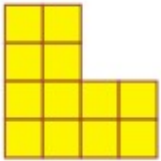
Answer. By completing the grid with squares of one centimeter, we find the number of such Squares is 32.
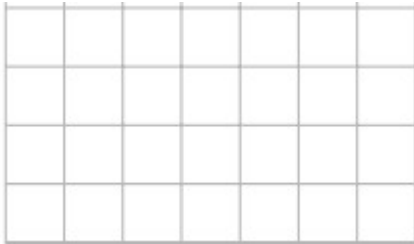


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Q7 Look at the picture. Can you divide it into 4 equal pieces? Each piece should have the same number of squares.



Answer. DIY

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