



Name: N I S H T H A

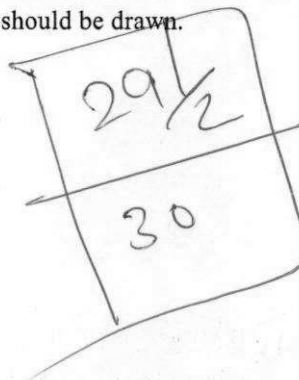
Roll No: 1 9 8 0 9 8 5 1 1 6

No. of Additional Sheet used :

## Group I

30 Marks

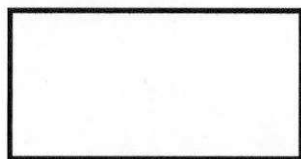
1. There are 15 questions in the question paper. All questions are compulsory.
2. Question number 1 to 4 are single choice correct type questions. Each question carry 1 Mark.
3. Question number 5 to 7 are very short answer type questions. Each question carry 1 Mark.
4. Question number 8 to 10 are short answer type questions. Each question carry 2 Marks.
5. Question number 11 to 13 are short answer type questions. Each question carry 3 Marks.
6. Question number 14 to 15 are long answer type questions. Each question carry 4 Marks.
7. Wherever necessary, neat and properly labeled diagrams should be drawn.



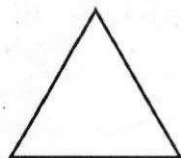
0 1

In the following figures, the figure that is not symmetric with respect to any line is:

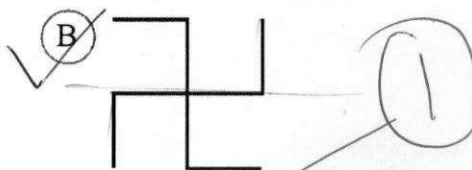
(A)



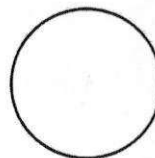
(C)



(B)



(D)



(1 Mark)

0 2

Which of the following letters does not have a line of symmetry?

(A) K

(B) S

(C) M

(D) H

(1 Mark)

0 3

Area of a rectangle of length 6 m and breadth 1 m is

(A)  $5 \text{ m}^2$

(B)  $6 \text{ m}^2$

(C)  $1 \text{ m}^2$

(D)  $7 \text{ m}^2$

(1 Mark)

0 4

Perimeter of any closed figure is \_\_\_\_\_.

(A) product of all its sides

(B) sum of all its sides

(C) sum of square of all its sides

(D) square of product of all its sides

(1 Mark)

0 5

Find the perimeter of an equilateral triangle of side 9 cm.

Perimeter of an equilateral triangle =  $9 \text{ cm} \times 3$   
 $= 27 \text{ cm}$

(1 Mark)

0 6

What is Perimeter? [1 MARK]

Perimeter is sum of all sides of a closed figure.

(1 Mark)

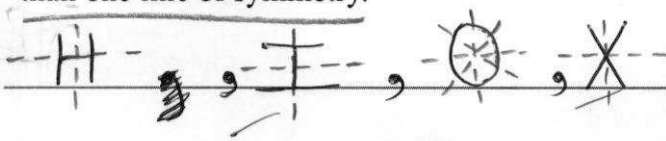
Name: N I S H T H A

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Sheet No:

0 7

Write all the capital letters of the English alphabets which have more than one line of symmetry.



(1 Mark)

0 8

The floor of a room is in the shape of a square. If the length of one of its side is 4 m, then find the cost of carpeting the room at the rate of ₹40 per square meter. [2 Marks]

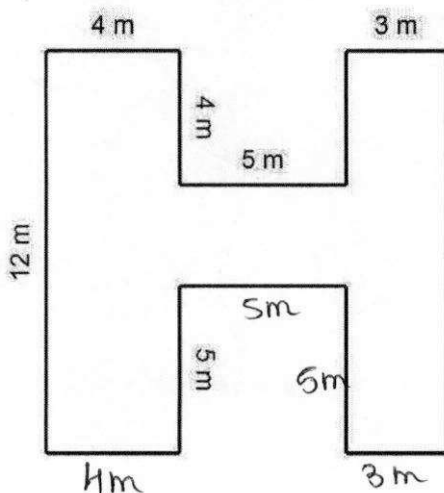
(2 Marks)

Length of one side of a room = 4m  
 Perimeter of room = ~~4~~ × Side × Side × Side  
 $= 4 \times 4$   
 $= 16 \text{ m}^2$

Cost of carpeting the room = ₹40 per square meter  
 ∴ Cost of  $16 \text{ m}^2$  room =  $16 \times 40$   
 $= ₹640$

0 9

Ans- Cost of carpeting the room at the rate of ₹40 per square meter is ₹640.  
 Find the perimeter of the following figure. Square meter is ₹640.



$4 + 4 + 5 + 3 + 12 + 3 + 5 + 5$   
 $+ 5 + 4 + 12$   
 $\begin{array}{r} 12 \\ 24 \\ \hline 36 \end{array} \quad \begin{array}{r} 20 \\ 16 \\ \hline 26 \end{array}$   
 $\begin{array}{r} 36 \\ 26 \\ \hline 62 \end{array}$

(2 Marks)

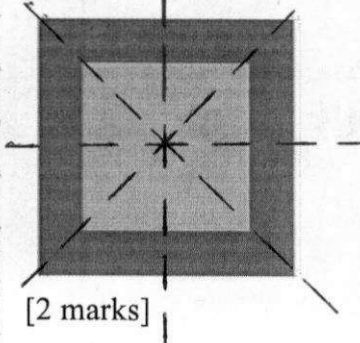
Perimeter of the following figure =

$$4m + 12m + 4m + 5m + 5m + 5m + 3m + 12m + 3m + 5m + 4m = 62m$$

2

1 0

Find the number of lines of symmetry for the given shape:



[2 marks]

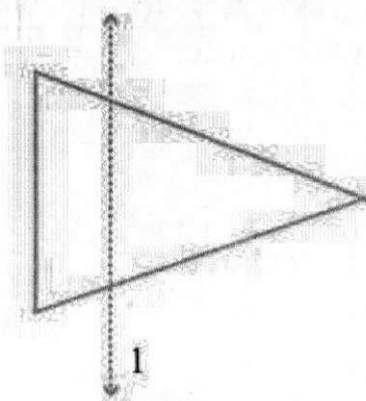
2

(2 Marks)

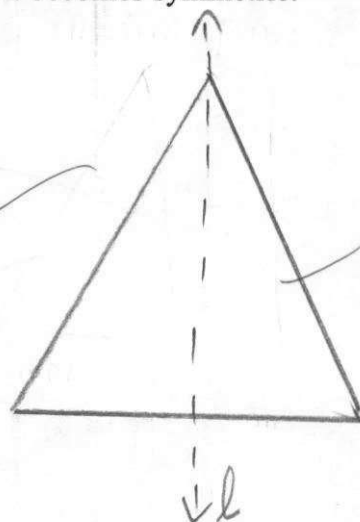
4 lines of ~~sym~~ symmetry is possible for the given figure.

1 1

In the figure,  $l$  is the line of symmetry. Draw the image of the triangle and complete the diagram, so that it becomes symmetric.



[3 marks]



3

(3 Marks)

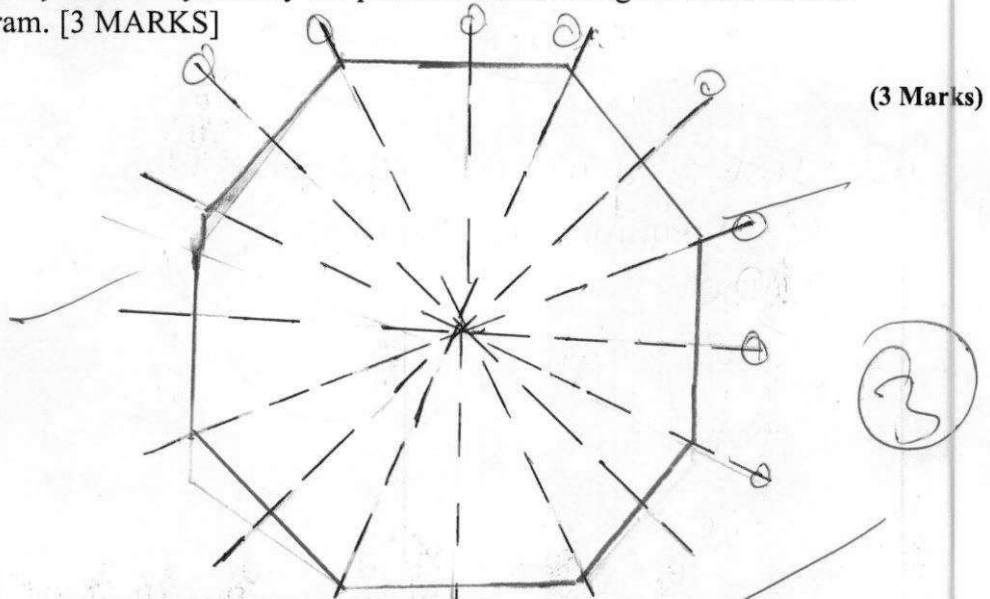
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Roll No: 1 9 8 0 9 8 5 1 1 6

Sheet No:

1 2

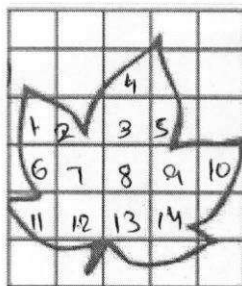
How many lines of symmetry are possible for an octagon? Show it with a diagram. [3 MARKS]



(3 Marks)

1 3

Find the area of the given figure by counting squares:



Full Squares = 7

(3 Marks)

More than Full Squares = 7  
Half

Area of the given figure = 7 + 7  
= 14 square unit

1 4

If the cost of painting is Rs 250 per km, then what is the cost for painting the boundary of an equilateral triangle shaped garden having its sides as 4 km also find the area of the garden if its height is 3.46 km [4 MARKS]

Side of a equilateral triangle = 4 km (4 Marks)  
Perimeter = ~~4 km~~ + ~~4 km~~ + ~~4 km~~ 4 km x 3  
= 12 km



Cost of painting per km = ₹ 250

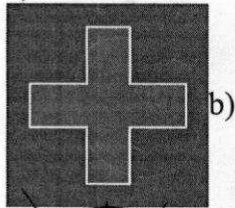
Cost of painting the boundary of an equilateral triangle = ~~250 × 12~~ 250 × 12  
 = ₹ 2900 3000 250

Ans - Cost of painting the boundary of an equilateral triangle is ₹ 2900.  
 500  
 + 2500  
 3000

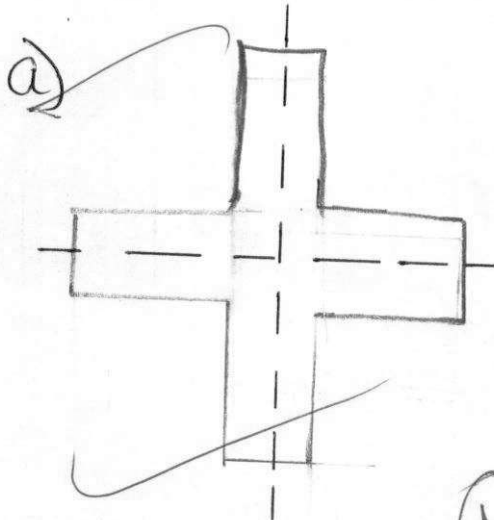
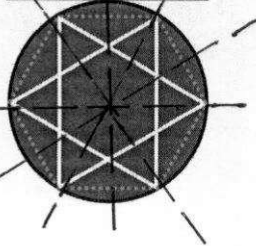
1 5

Find the number of lines of symmetry for each of the following shapes:

a)



b)



(4 Marks)

