

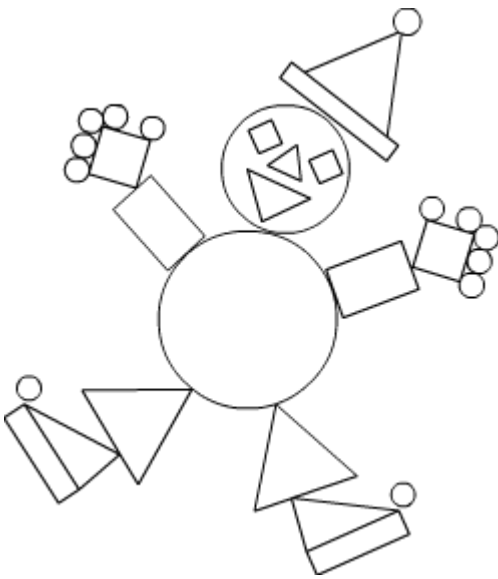
CHAPTER -5

SHAPES AND DESIGN

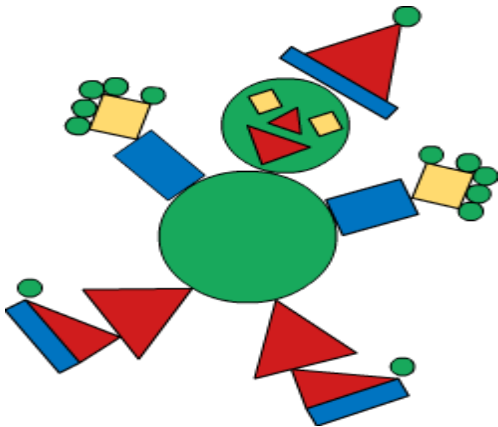
2MARK QUESTIONS

1Q.Colour the clown following the directions given below:

Triangles: Red Squares: Yellow Rectangles: Blue Circles: Green

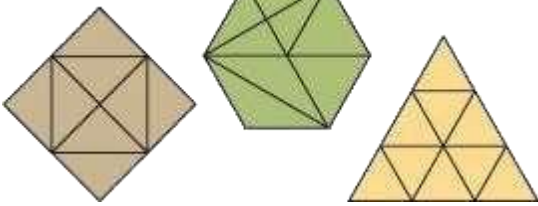


Ans:

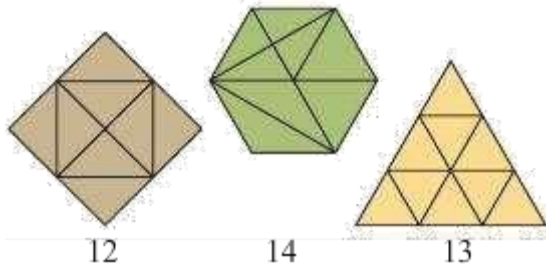


2Q.How many triangles are there in the following figures?

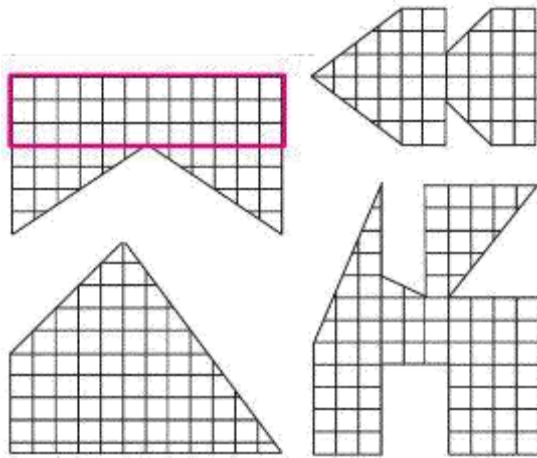
MATHS



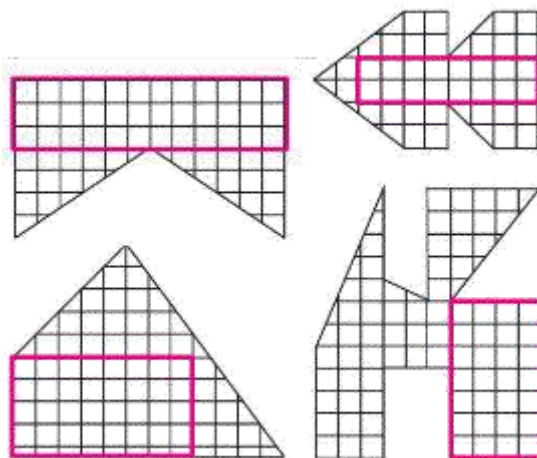
Ans:



3Q. Find the biggest rectangle in the figures given below



Ans:



4Q. Meeta and her 5 friends were playing a game. Tinku was blindfolded and asked to keep clapping as long as he wished while the others would move around the table. The moment Tinku stopped clapping, everybody would stop wherever they were. The child who was not at a corner would be out. Then she would be blindfolded.



(a) Looking at the picture given above, can you tell who is out?

Ans: As per the rule, Guddu is out because he is not standing at any of the corners of the table.

(b) Where is Guddu standing?

Ans: Guddu is standing in the middle of one of the sides of the table.

(c) Can this game be played around a round table? Why?

Ans: According to the rule, if a person is not standing at the corner then he is out. But in the round table there is no corner and no one will be out. Therefore, the game cannot be played.

Q5. (a) Look around you and identify things with straight and curved edges. Ans: Table, a blackboard and a duster have straight edges and a coin, a bottle and chalk have curved edges.

(b) Do the things with straight edges have corners? Ans:


Yes, the things with straight edges have corners.

(c) Do the things with curved edges have corners?


Ans: No, the things with curved edges do not have corners.

(d) Try to find things which have both straight and curved edges. Ans: A book and a protector have both straight and curved edges.

Q6. Look at the following table and tick (✓) the names of things that have corners. Also count the number of edges and corners in each of them.

| Name of thing | Whether it has corners | Number of edges | Number of corners |
|---|------------------------|-----------------|-------------------|
| Die  | Yes | | 8 |
| Ball | | | |
| Eraser | | | |
| Egg | | | |
| Sheet of paper | | | |

Ans:

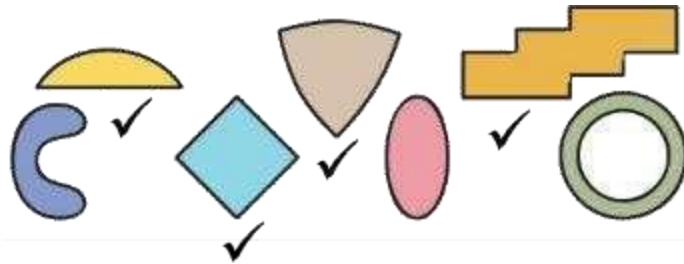
| Name of thing | | Whether it has corners | Number of edges | Number of corners |
|---|---|------------------------|-----------------|-------------------|
| Die  | ✓ | Yes | 12 | 8 |
| Ball | | No | | |
| Eraser | ✓ | Yes | 12 | 8 |
| Egg | | No | | |
| Sheet of paper | ✓ | Yes | 4 | 4 |

Q7. In the following figures, tick (✓) those which have corners. Do these figures have curved lines?

Using only straight lines, can you draw a figure which has no corners?



Ans:



Yes, four of the given figures have curved lines.

No, we cannot draw a figure with a straight line which has no corners.

Q8. How many triangles do you have in your set? Are all of them equal in size? Find out.

Ans: After measuring the sides of the triangle we can say that only two of the three given triangles in a set are equal in size.

5 MARK QUESTIONS

1Q. Use the two small triangles in the tangram set to get the following shapes:



(1)



(2)



(3)

Ans: (1)



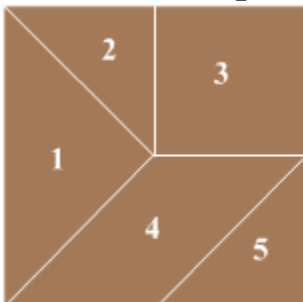
(2)



(3)

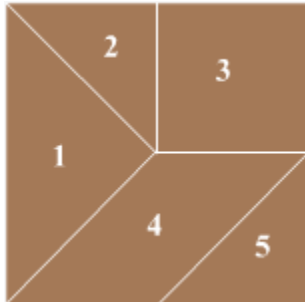


2Q. Which two pieces of the tangram set are exactly the same? Find out

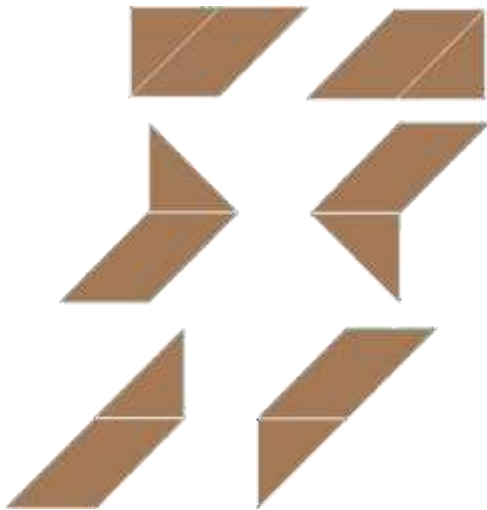


Ans: Piece 2 and 5 of the tangram set are exactly the same

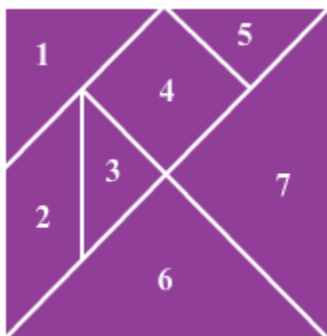
3Q. Take pieces 4 and 5 from the set and find out on which side of the triangle you can join the other piece.



Ans:



4Q. Use only triangles



Ans:



5Q. Use pieces 1, 2, 3 and 5



Ans:



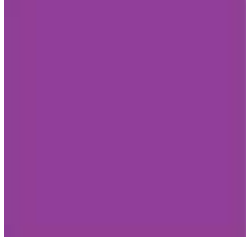
6Q. Use only two triangles



Ans:



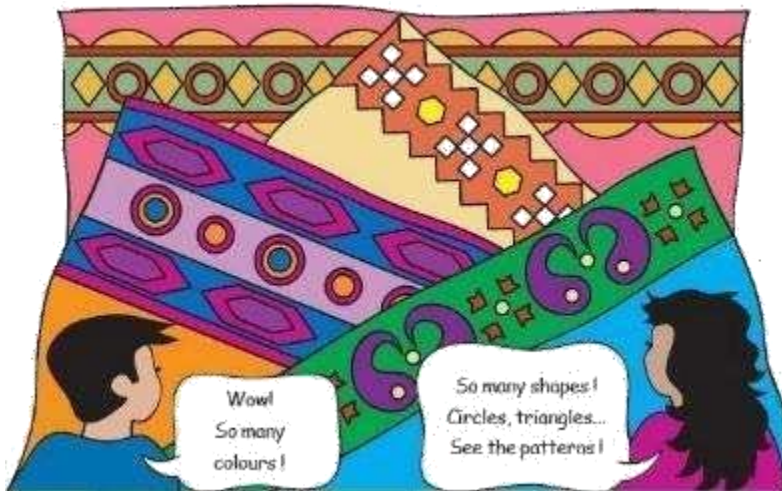
7Q. Use pieces 1, 2, 3, 4 and 5



Ans:



8Q. Which geometrical shapes can you identify in these borders? Draw them in your notebook.



Ans:

Circle



Square



9Q.Is any shape repeating in a particular pattern? Which ones? **Ans:**



10QAre the shapes made of

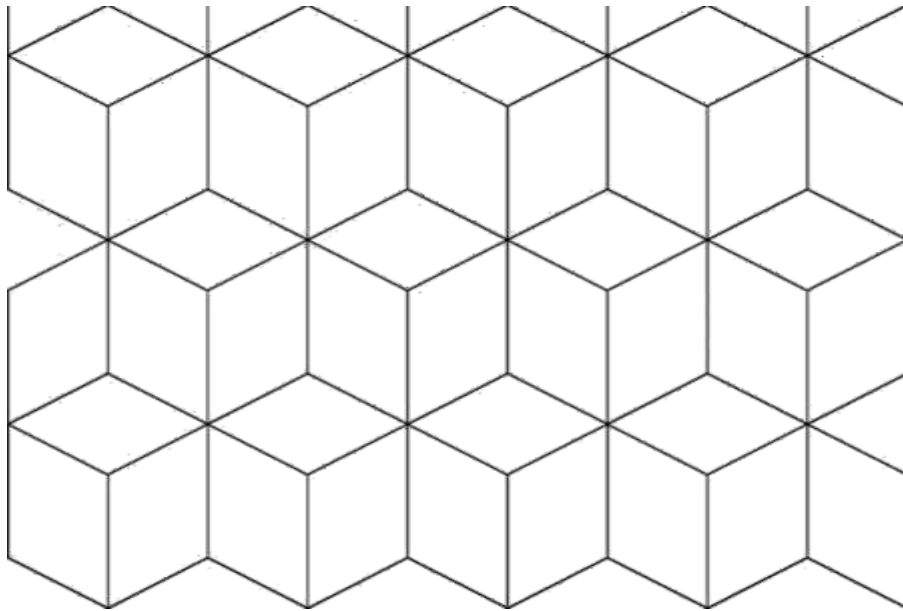
(i) Curved lines

(ii) **Straight lines**

(iii) **Both curved and straight lines.**

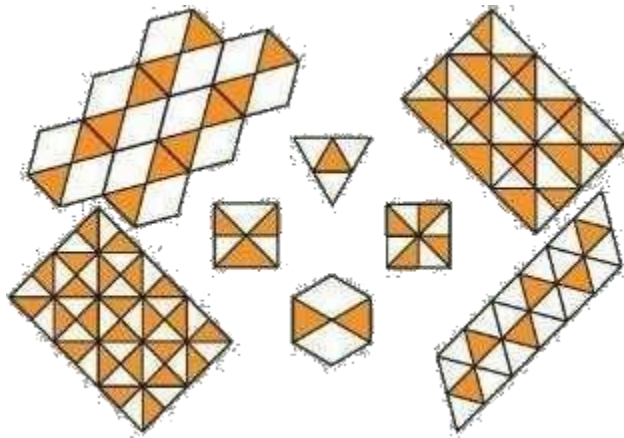
Ans: These shapes have both curves and straight lines.

11Q. Look at your clothes, your mother's saris/shawls, rugs and mats. Can you identify some patterns? Draw them in your notebook.

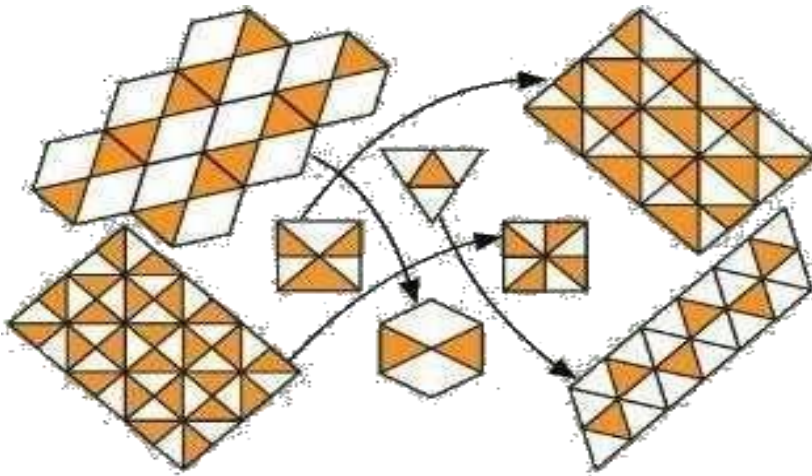


Ans: In my shirt there is rhombus pattern which is shown below:

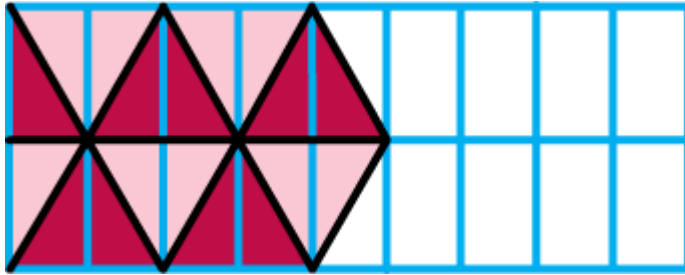
12Q, You can also make your own tiles and use them to make your own tiling patterns. You will find some such tiles at the end of the book that you can cutout, trace and colour.



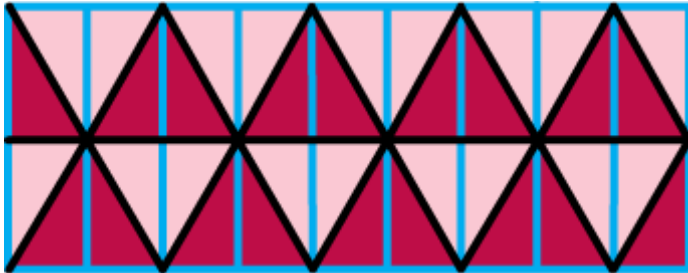
Ans:



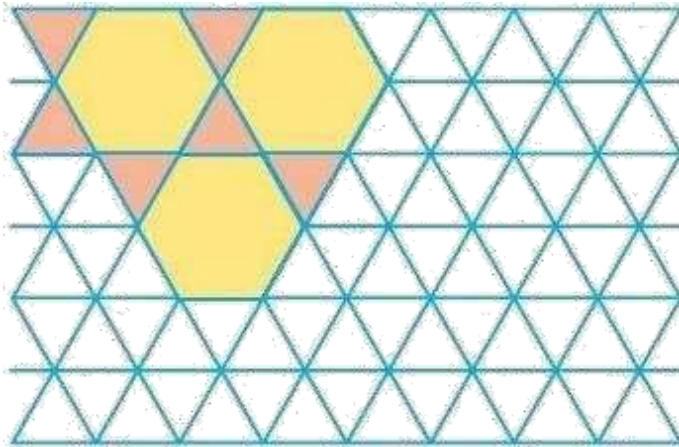
13Q. Complete the following tiling pattern



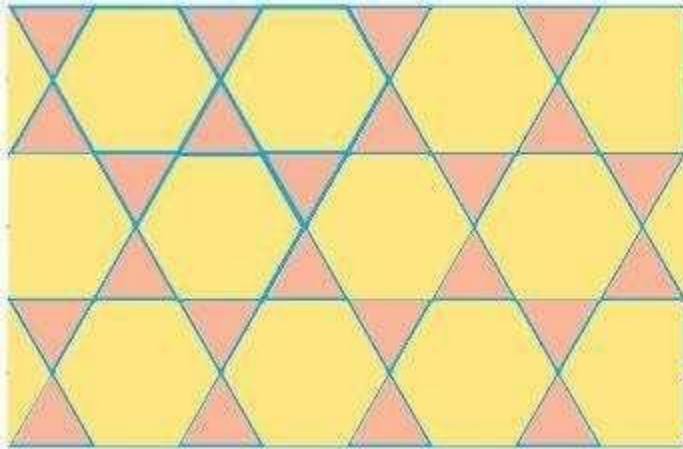
Ans:



14Q. Complete this pattern. Compare it with the pattern on page 70 which also uses six sided shapes. What is the difference between th

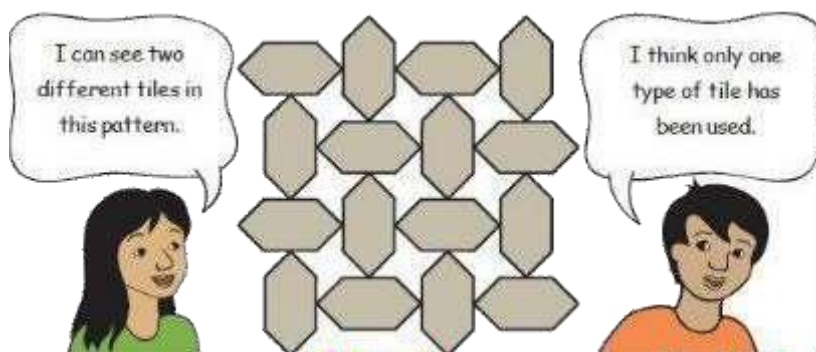


Ans:



Both shapes are regular hexagons. The only difference is that when we rotate anyone of the shapes by 90° , a different shape appears.

15Q.Khushboo and Hariz live in Agra. One day they went to see the Taj Mahal. The floor had the pattern shown



What do you think? Discuss with your friends.

Ans: I think the same type of tile is used in the floor pattern in two directions: Horizontal and Vertical.

