

Chapter 9

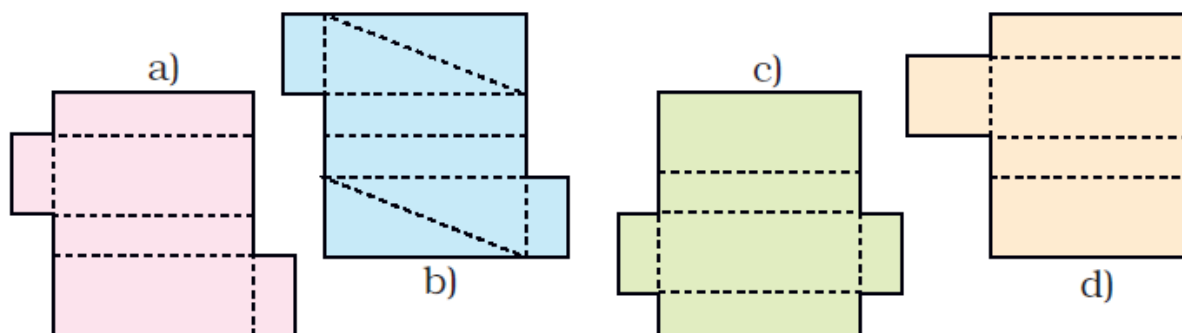
Boxes and Sketches

4Marks Questions

Sweet box:

Ramya went to buy sweets. The shopkeeper took a paper cut-out and quickly made a lovely pink box for the sweets!

1. She made four more shapes. Each is to be folded along the dotted lines. You have to find out which of these can be made into a box.



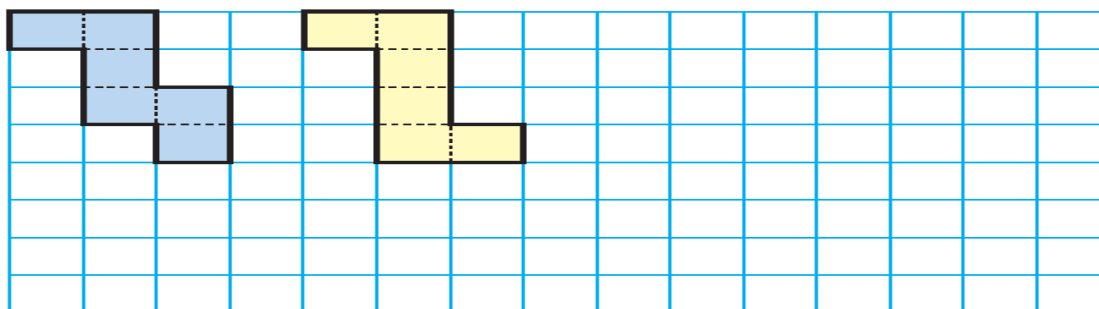
Solution:

Cutouts of (a) and (c) can be made into boxes.

2. Shapes that fold into a cube:

A. Buddha wants to make a paper cube using a squared sheet. He knows that all the faces of a cube are squares.

He draws two different shapes.



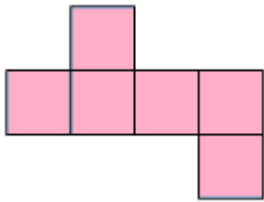
1. Will both these shapes fold into a cube?

Solution:

Yes, both shapes can be folded into cubes.

2. Draw at least one more shape which can fold into a cube.

Solution:



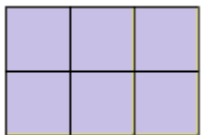
3. What will be the area of each face of the cube?

Solution:

The area of each face of the cube = side \times side.

4. Draw one shape which will not fold into a cube?

Solution:



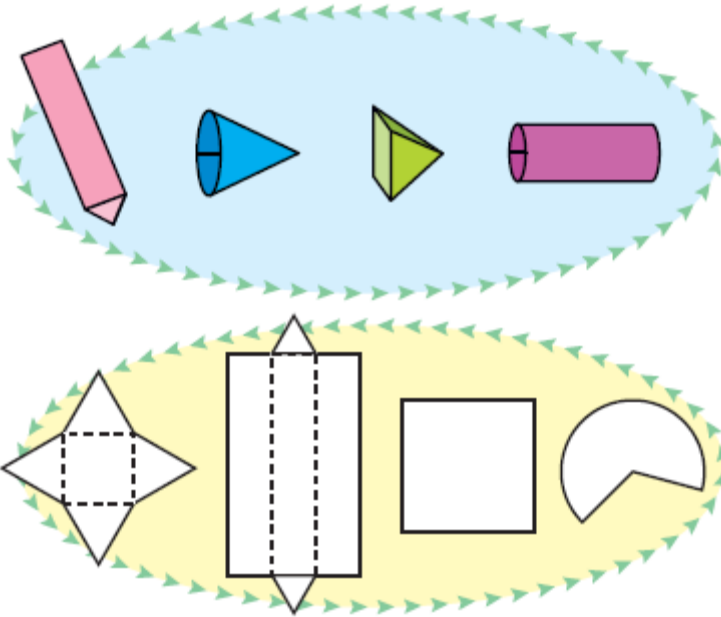
5. Look around and discuss which things around you look like a cube. List a few?

Solution:

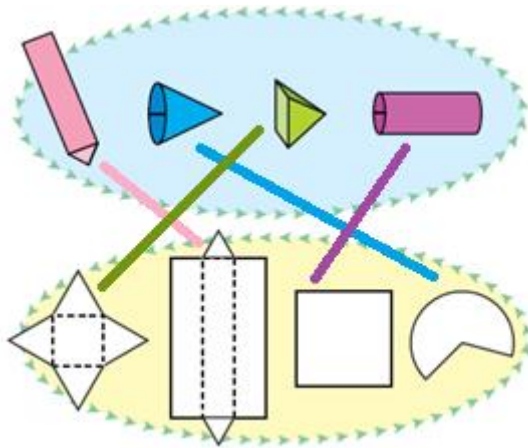
Dice, Rubik's cubes, Ice cubes and sugar cubes resemble the shape of a cube.

3.Boxes and boxes:

1. All boxes are not cubes. Here are some different kinds of boxes. Match the shape on the left with a box into which it will fold?

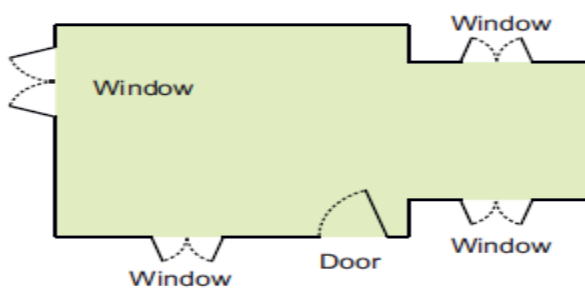


Solution:



4. Floor maps:

1. For making a house a floor map is first made. Have you ever seen a floor map? Here is a floor map of Vibha's house. It shows where the windows and the doors are in the house?

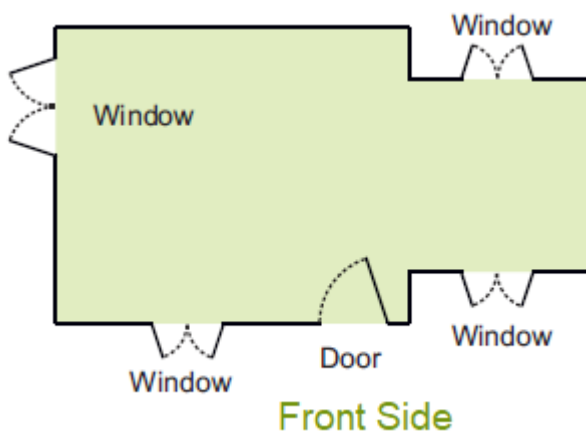


Solution:

Yes, I have seen a floor map.

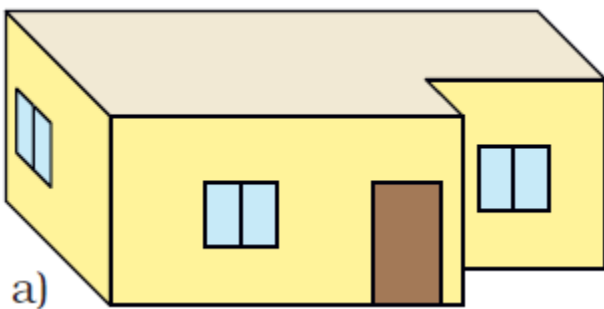
2. Which is the front side of her house? How many windows are there on the front side?

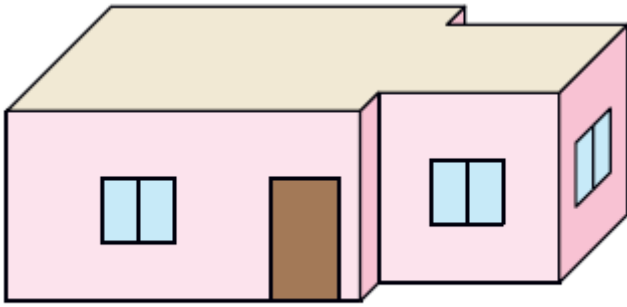
Solution:



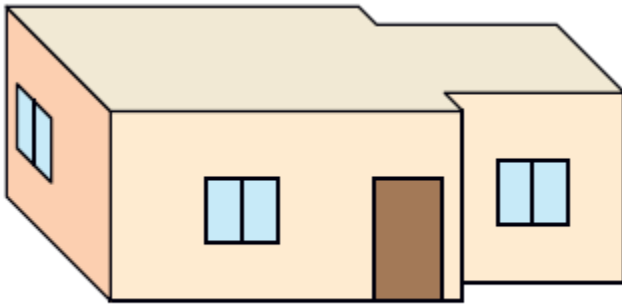
Front side of her house shows in the figure. There are two windows on the front side.

3. Which one is Vibha's house?

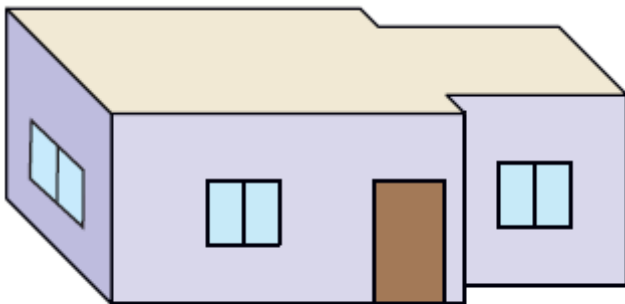




b)



c)

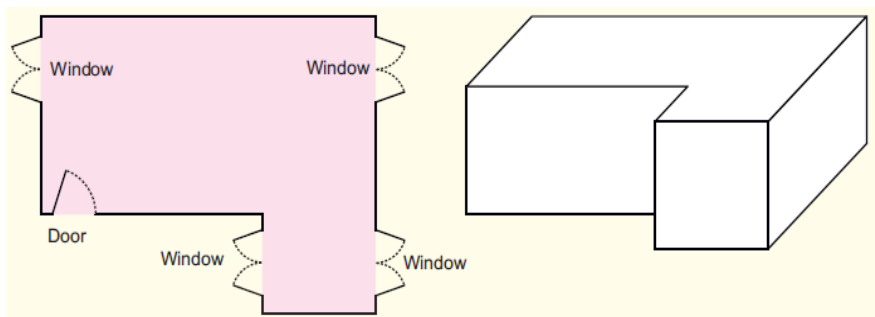


d)

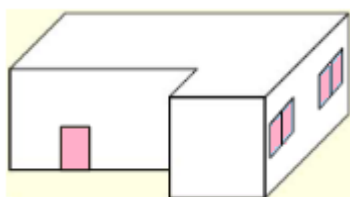
Solution:

Deep drawing (c) is Vibha's house.

5. Look at this floor map of a house. Make doors and windows on the deep drawing of this house.



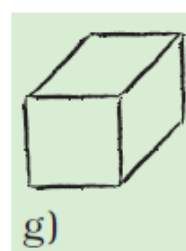
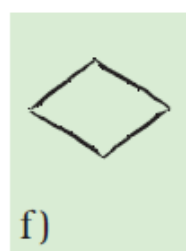
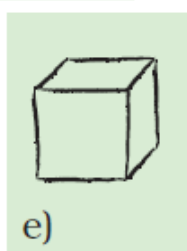
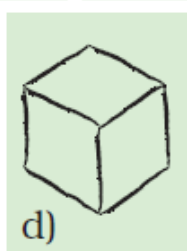
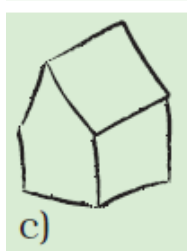
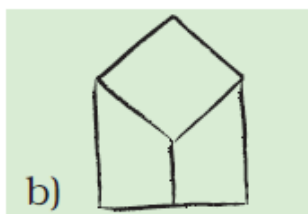
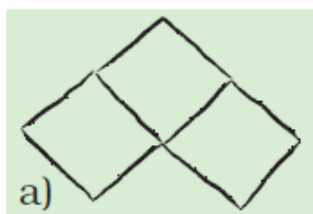
Solution:



A deep drawing of a cube:

Soumitro and his friends made deep drawings of a cube.

These are their drawings.



1. Which of the drawings look correct to you? Discuss.

Solution:

The drawings (d), (e) and (g) are correct.

2. Can you add some lines to make drawing (f) into a deep drawing of the cube?

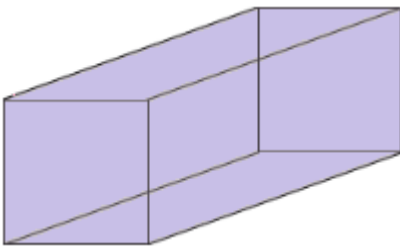
Solution:



3. In the same way make a deep drawing of a box which looks like this ?



Solution:

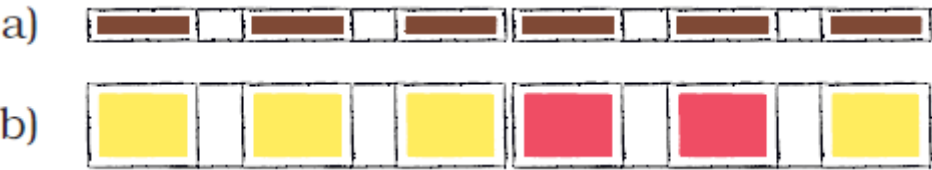


6.Matchbox play:

Navin, Bhaskar and Pratigya made this bridge using matchboxes.



1. If you look at the bridge from the top, how will it look? Choose the right drawing below?



Solution:



2. Look at the photo and try to make a deep drawing of this bridge?

Solution:

