

Spatial Reasoning Instrument.

● Name: _____

● Age: _____

● School: _____

● Year: _____

● Gender: ☐ Male ☐ Female

● Are you: ☐ Left-handed ☐ Right-handed

INSTRUCTIONS

- 1 This questionnaire surveys your spatial reasoning ability.
- 2 The questionnaire consists of 30 questions.
- 3 All questions are given in multiple choice format.
- 4 For each question, tick the correct answer as shown in the example below.

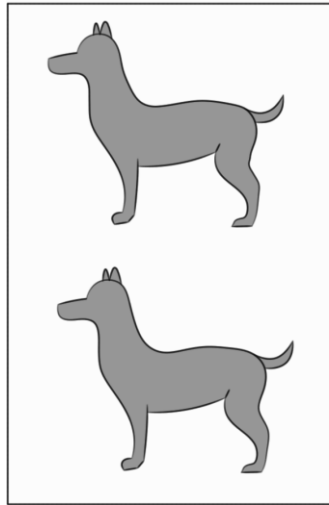


- 5 You have 45 minutes to complete the questionnaire.
- 6 It is very important that you answer all the questions.

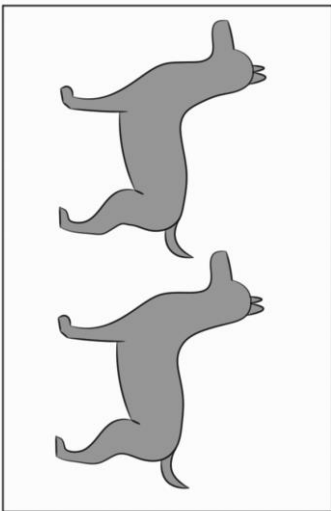
Thank you very much for your cooperation!

1

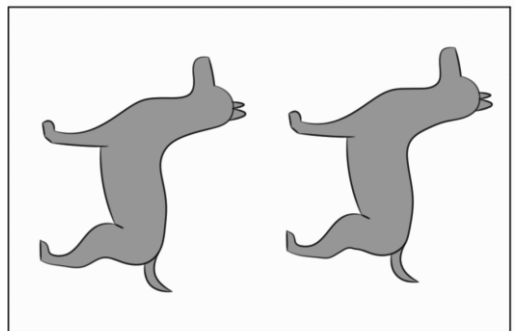
Below is a picture of two dogs.



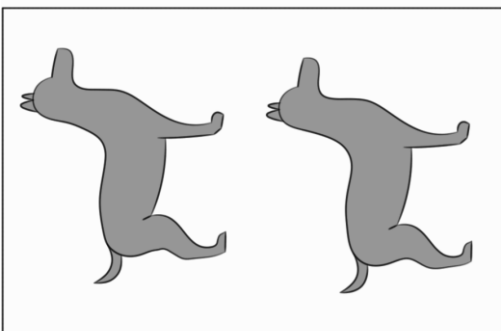
Which one of the following shows the picture after a 90 degree turn to the right ?



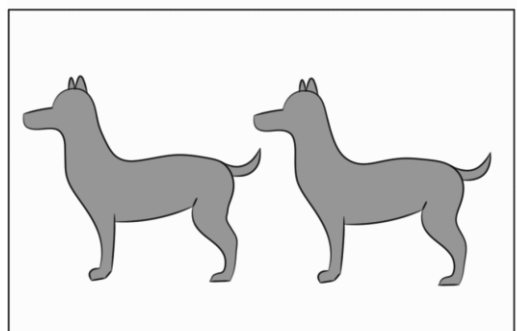
A



B

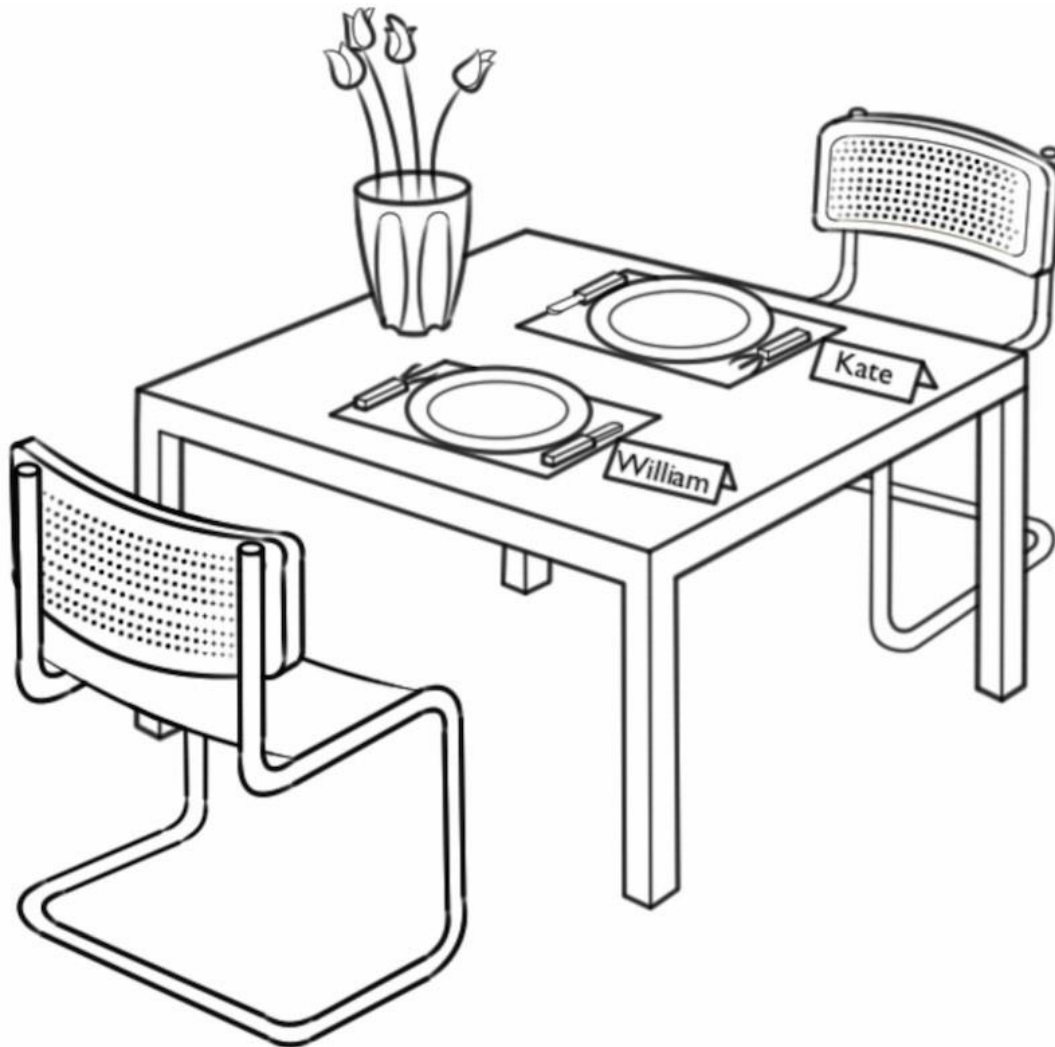


C



D

Kate and William's seating positions are shown below.



In which position is the flower vase from Kate's view?



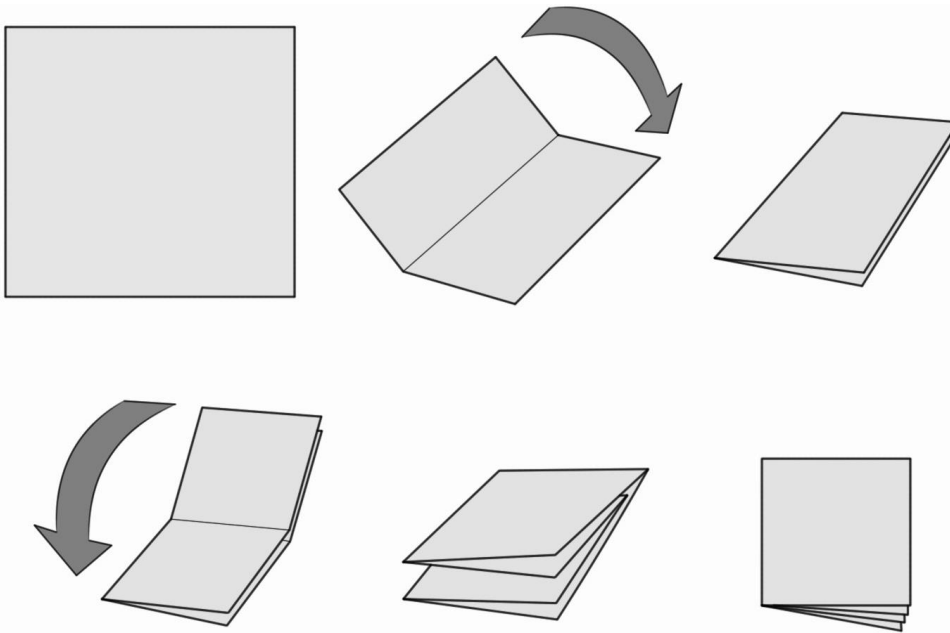
To her right.



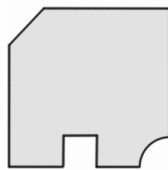
To her left.

3

Jane makes a pattern by first folding a square paper into 4 parts as shown below.

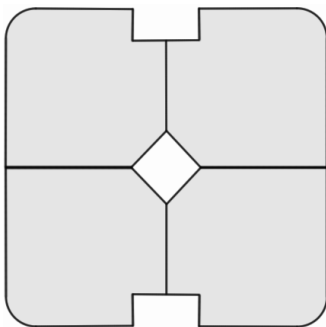


Jane then cuts the folded piece of paper into the shape shown below.

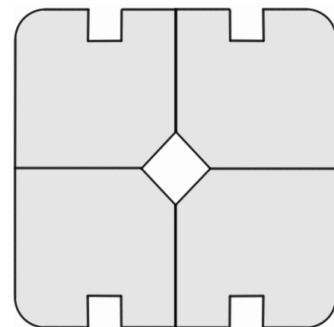


Which one of the following represents the pattern obtained by unfolding the paper ?

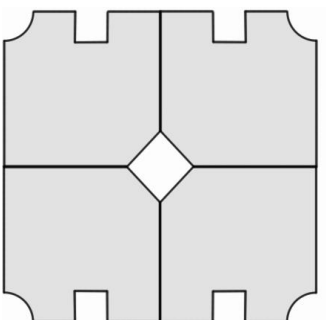
A



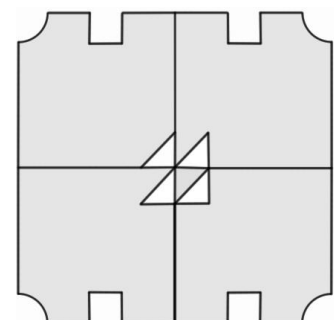
B



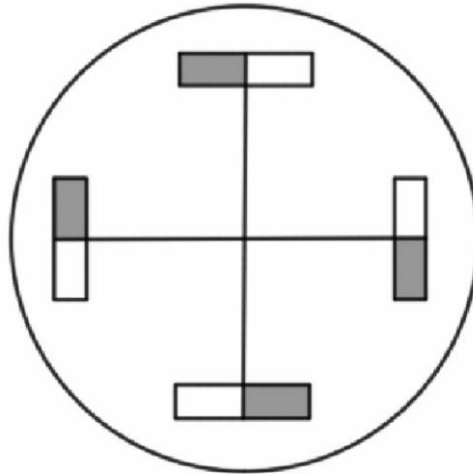
C



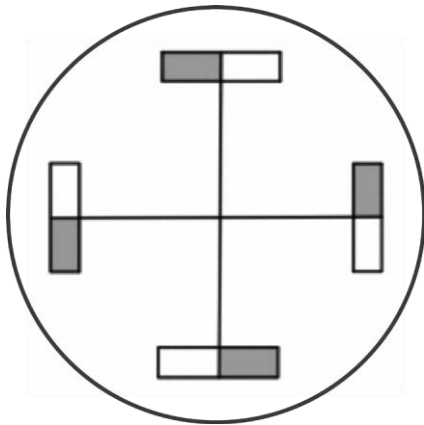
D



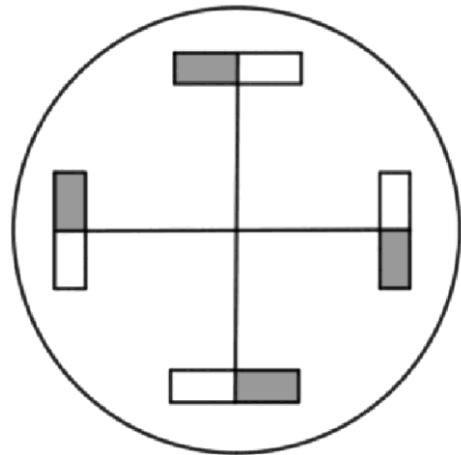
The figure shown below is rotated by one quarter turn anticlockwise.



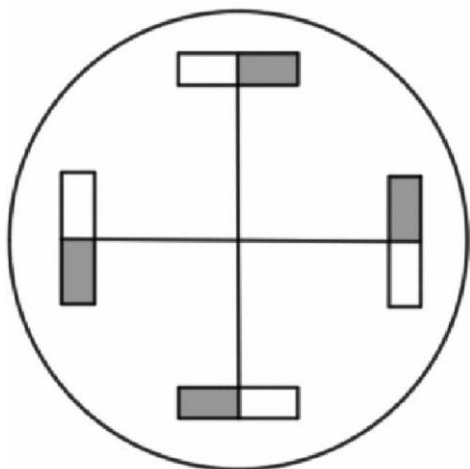
Which of the following shows the result of the rotation?



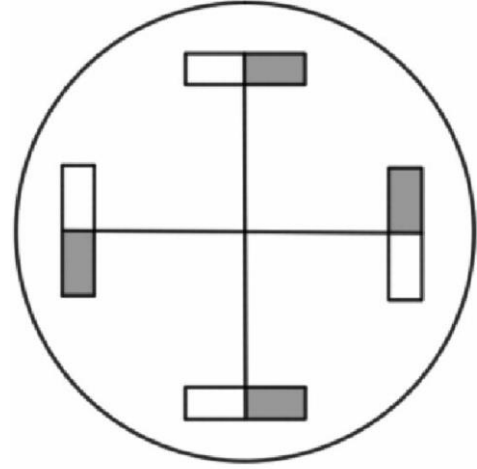
A



B



C



D

The diagram below shows a ballet dancer facing the audience.

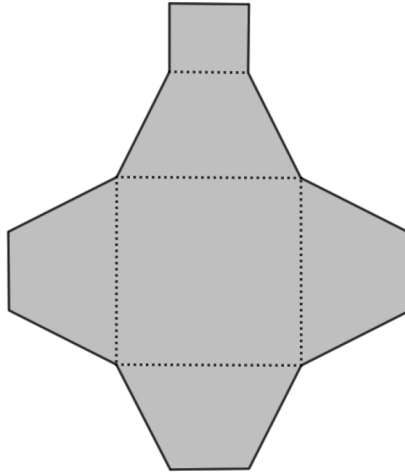


The ballet dancer is extending one of her arms.
Which arm has she extended?

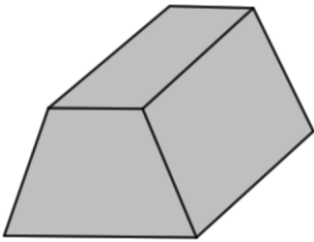
☐ A Right

☐ B Left

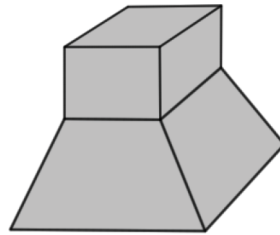
The diagram below represents the net of a box.



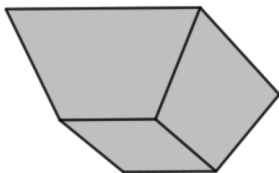
Which one of the following figures represents the box when the net is folded?



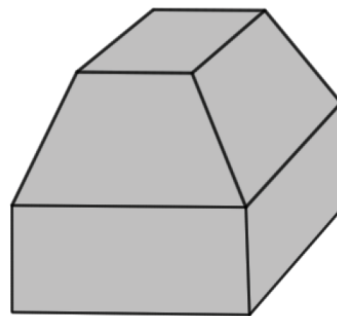
A



B



C



D

The figure below represents a design made by a student.



It is rotated in a clockwise direction. Which one of the following is a possible representation of the rotation?



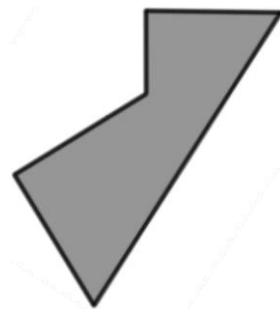
A



B

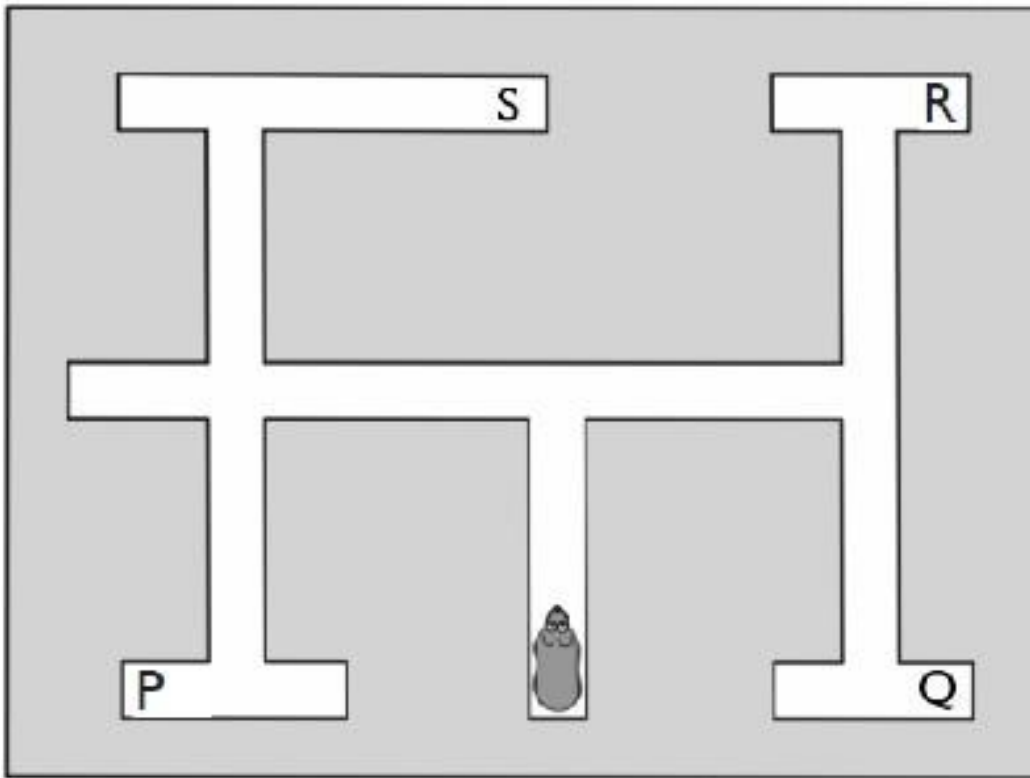


C



D

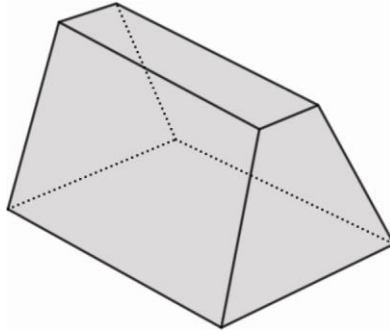
Briana placed a hamster at the start of a maze as shown below.



The hamster ran through the maze. It turned to its right, then turned left, then turned right. Where did the hamster finish?

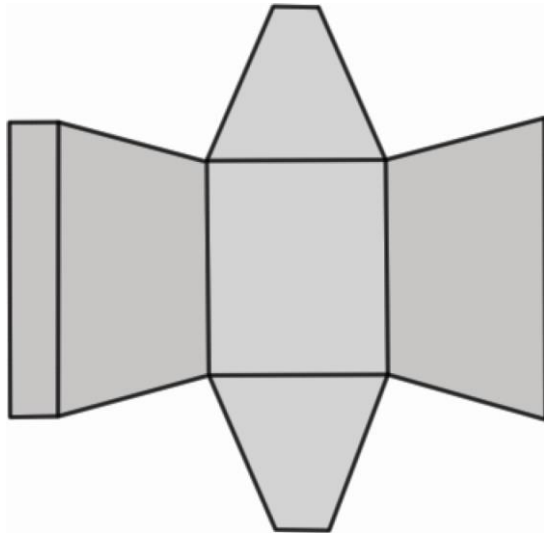
- ☐ A P
- ☐ B Q
- ☐ C R
- ☐ D S

The diagram below shows a fully enclosed chocolate box.

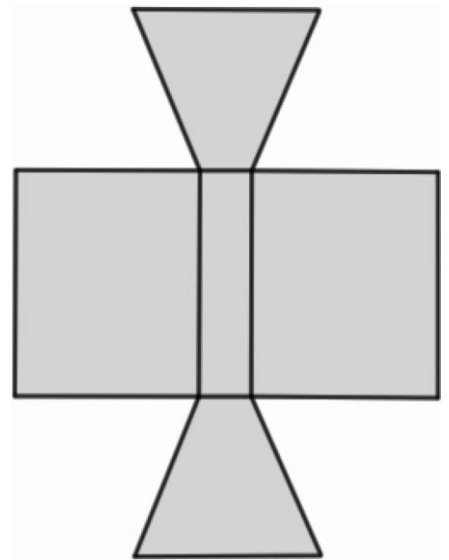


If the box is opened flat, which one of the following represents its net?

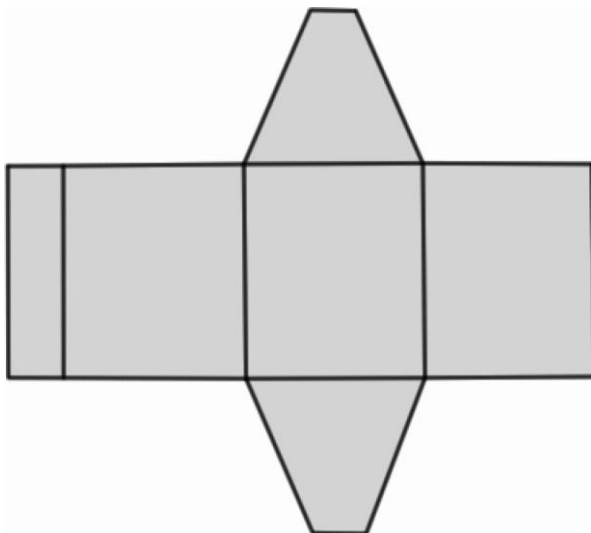
A



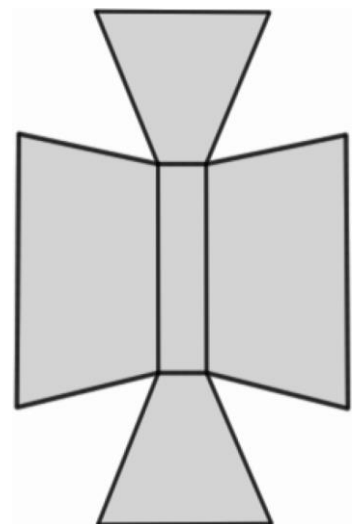
B



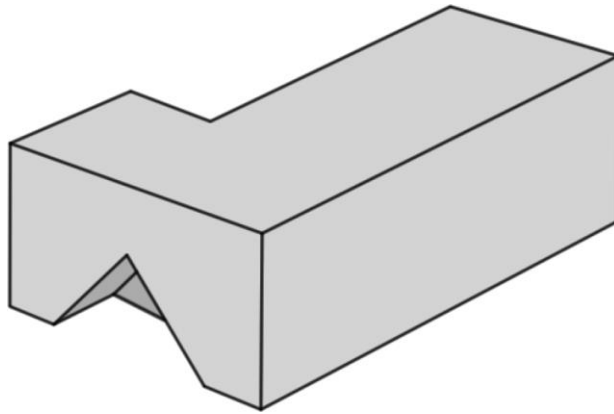
C



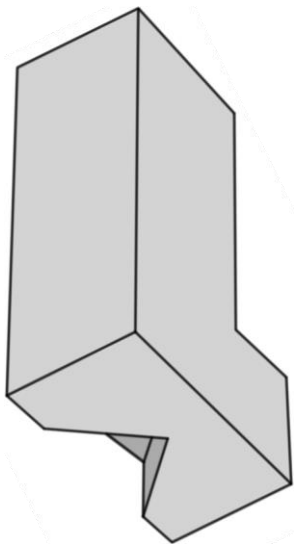
D



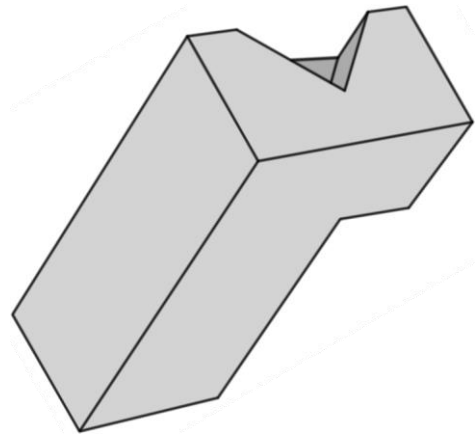
Consider the wooden block below.



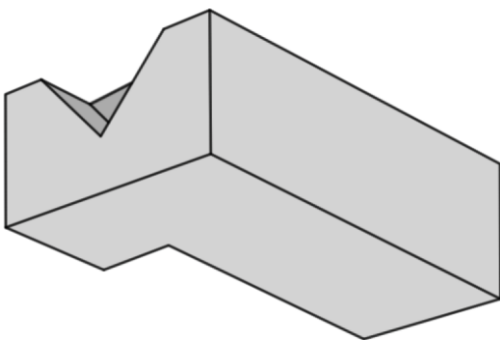
Which of the following represents a rotation of the model above?



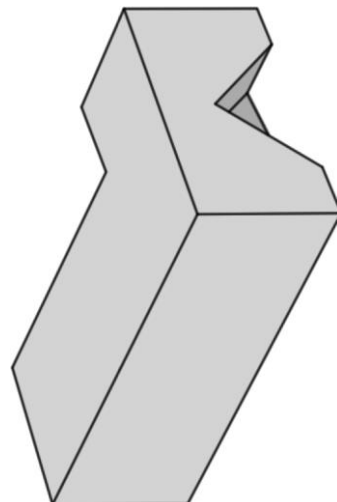
A



B

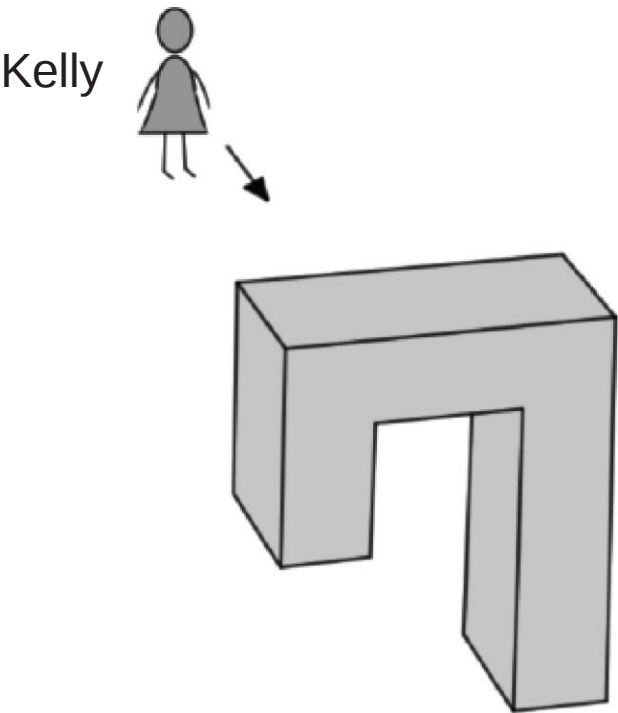


C

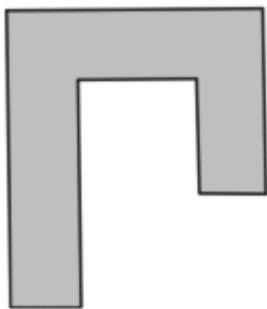


D

Kelly is looking at the design below from the position indicated.

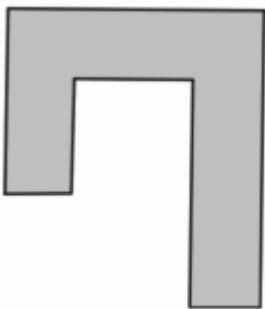


What does the front view of the design look like from Kelly's view ?



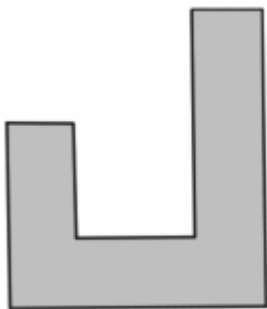
Kelly's Left.

Kelly's Right.



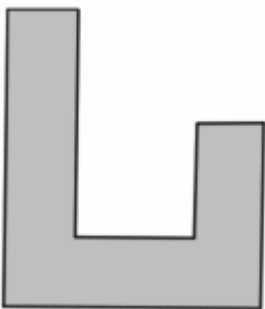
Kelly's Left.

Kelly's Right.



Kelly's Left.

Kelly's Right.

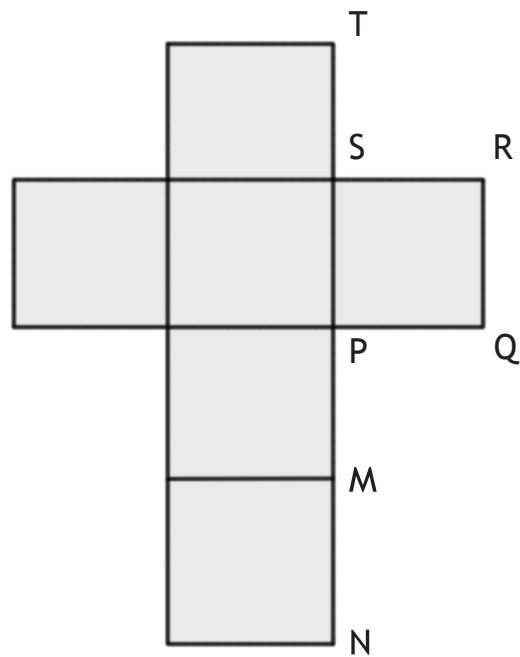


Kelly's Left.

Kelly's Right.



The diagram below shows the net of a cube.



When it is folded to form a cube, which edge joins with edge MN ?



Edge QR



Edge ST

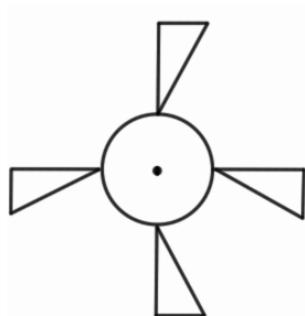


Edge MP

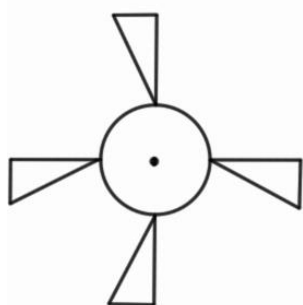


Edge PQ

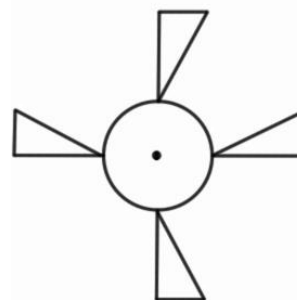
The diagram below shows the blades of a fan. It is rotated about its centre by a quarter turn clockwise.



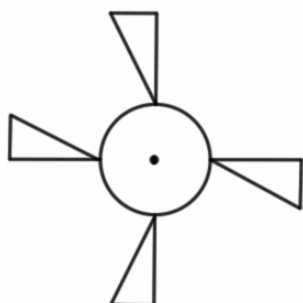
Which one of the following shows the result of the rotation?



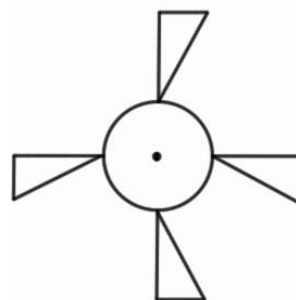
A



B

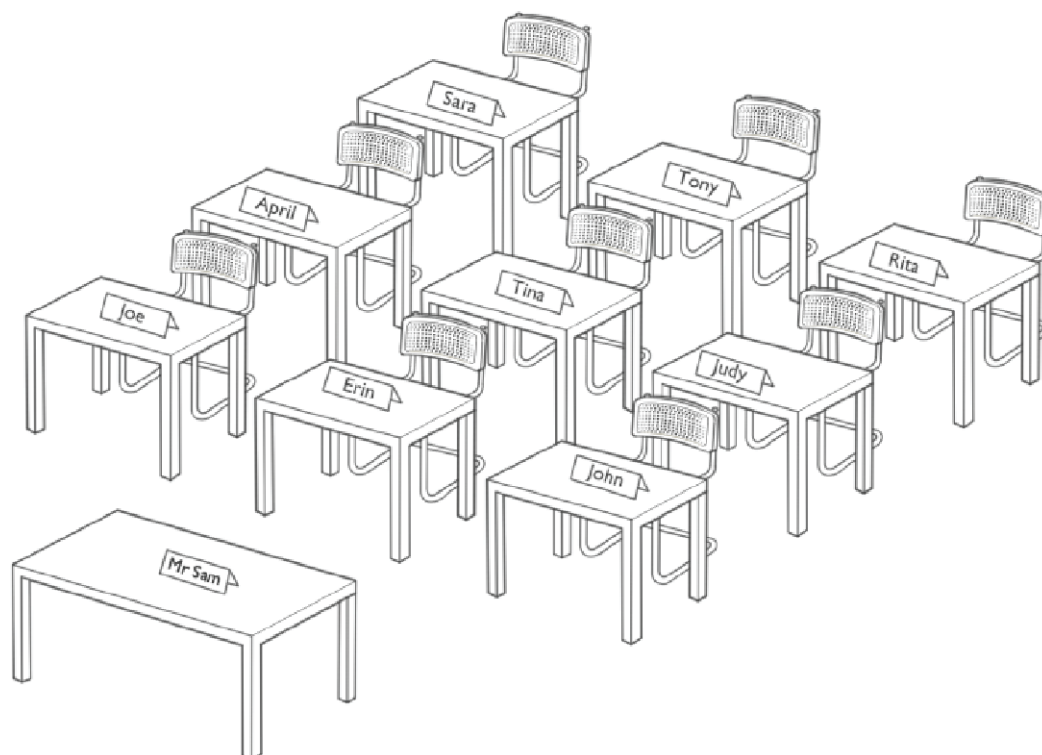


C

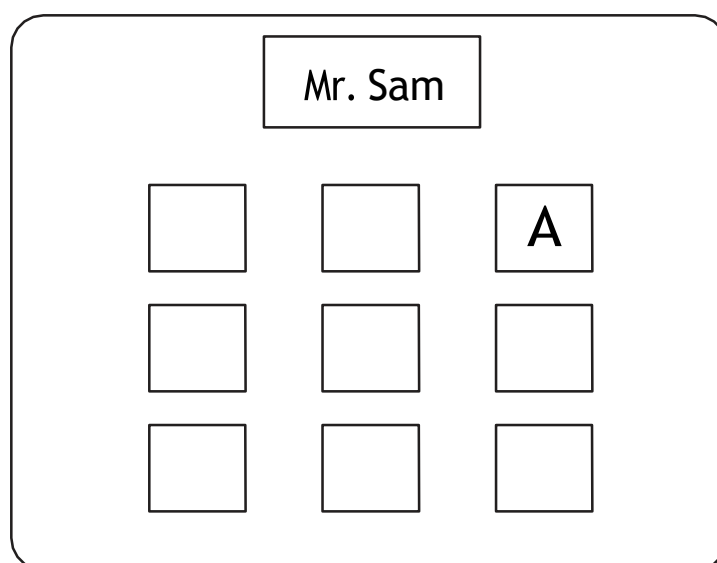


D

Below is the seating arrangement of Mr Sam's class.



On the class map below, who is seated at the position marked A?



Sara



Rita

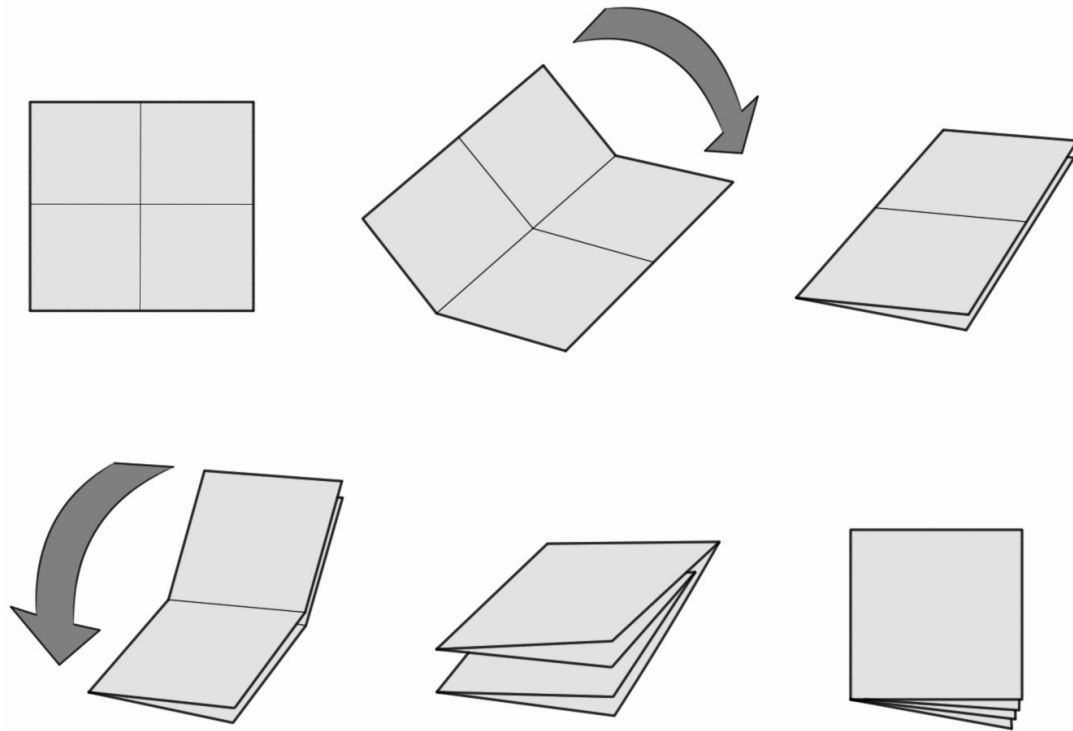


Joe

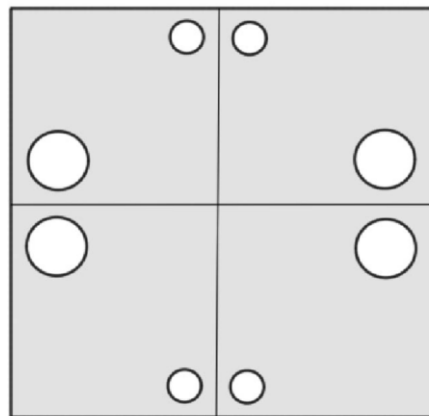


John

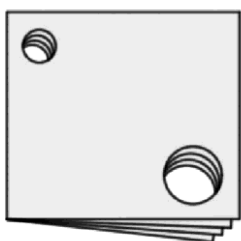
James makes a pattern by first folding a square paper into 4 parts as shown below.



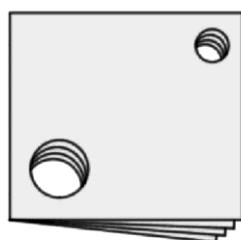
He then punched two holes (one big and one small) through all of the layers. The pattern that he obtained is shown below.



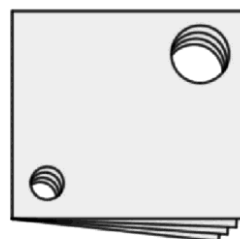
Where did James punch the two holes?



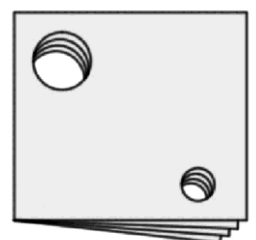
A



B



C



D

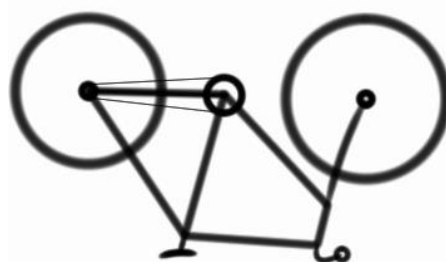
The figure below shows the picture of a bike.



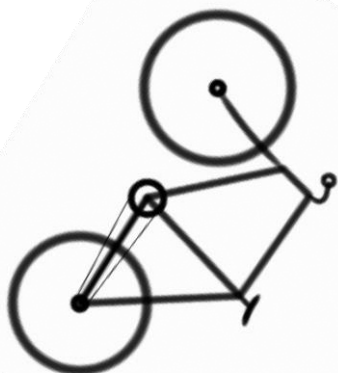
Which one of the following shows a rotation of the picture?



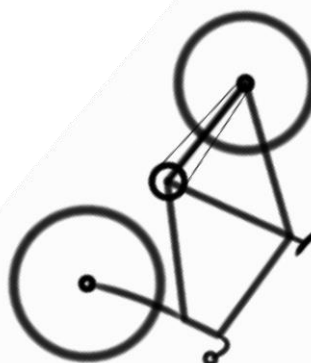
A



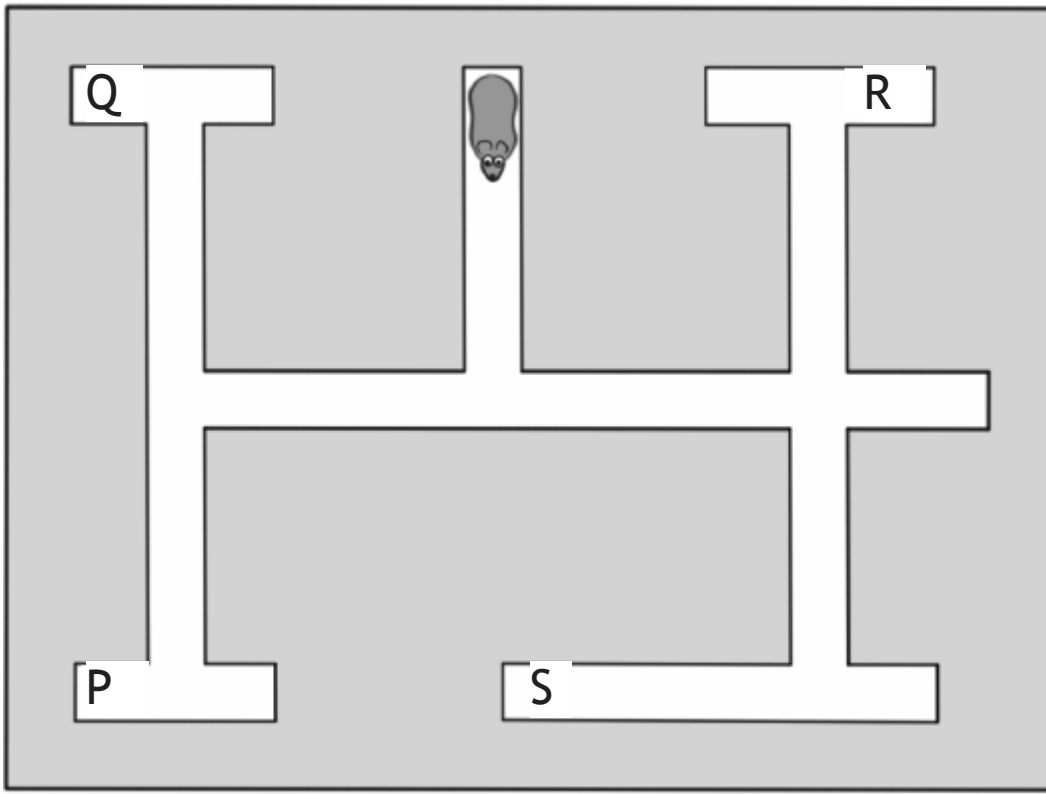
B



C

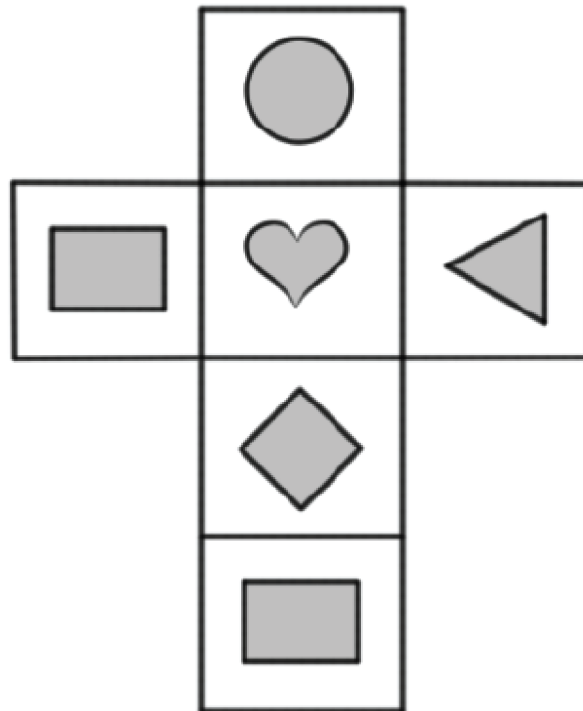


D

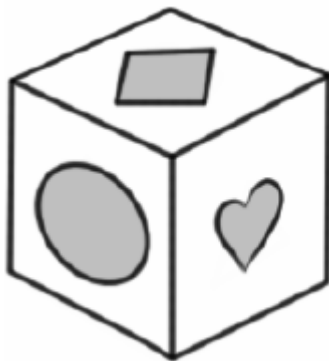


- A S
- B P
- C R
- D Q

This is the net of a cube.



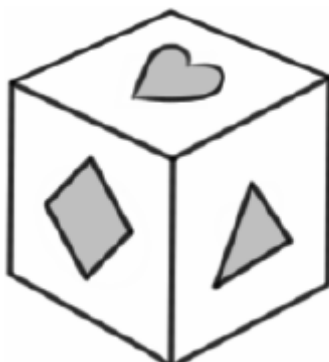
Which one of the following cubes could be made by folding the net?



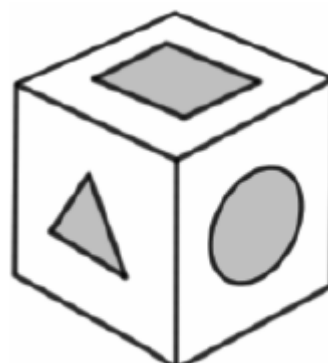
A



B

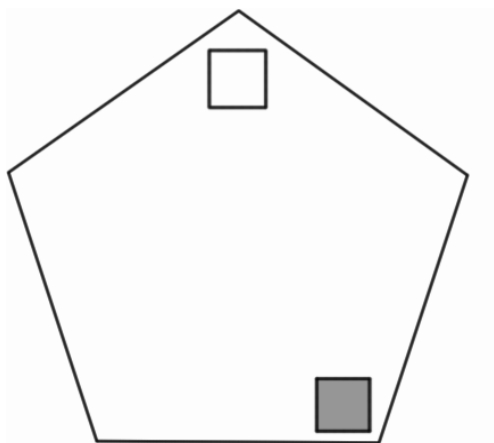


C

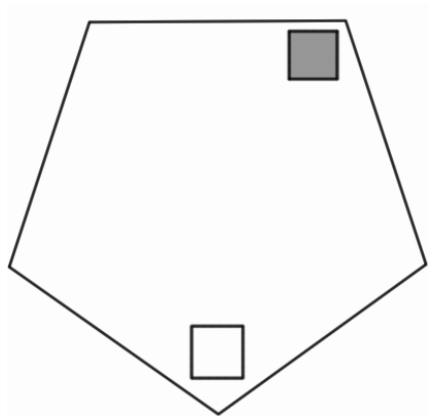


D

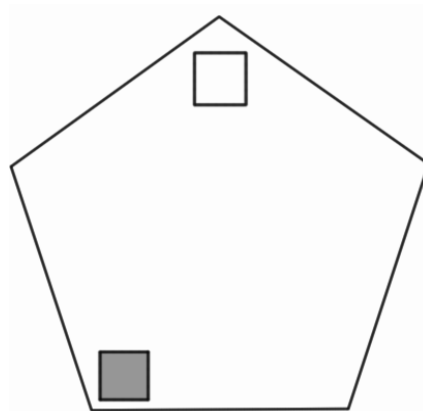
Consider the figure below.



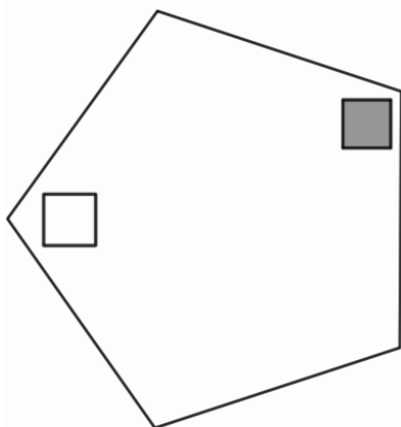
Which one of the following represents a rotation of the figure?



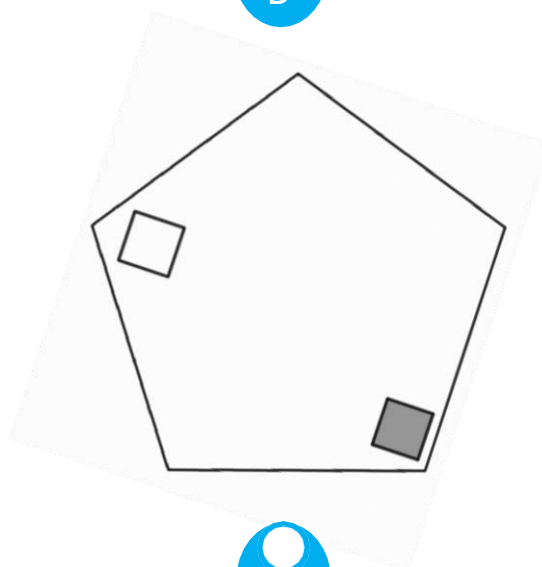
A



B

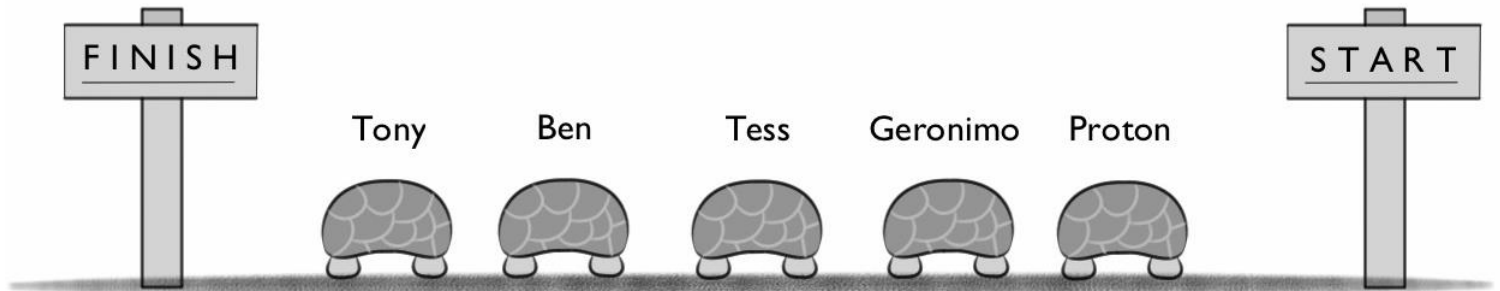


C



D

The diagram below shows a race among five turtles: Tony, Ben, Tess, Geronimo and Proton.



Which turtle is immediately behind Tess in the race?



Ben



Geronimo

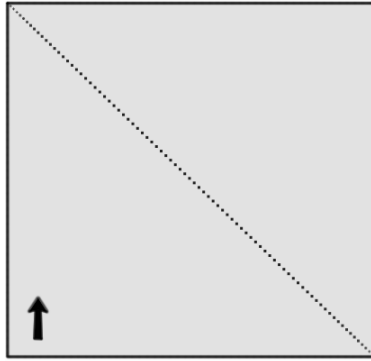


Tony

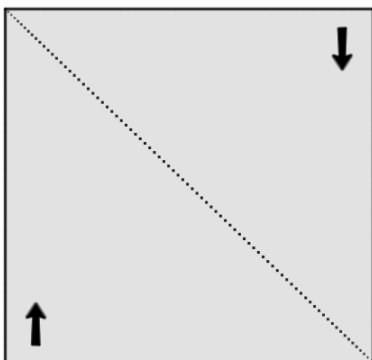


Proton

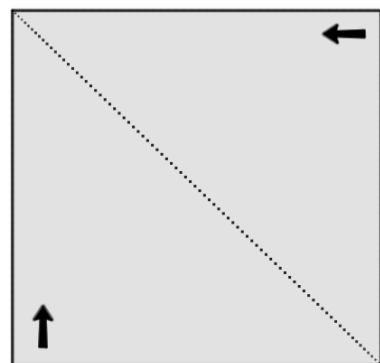
The diagram below represents a square sheet of paper with a line of symmetry along the diagonal and an arrow.



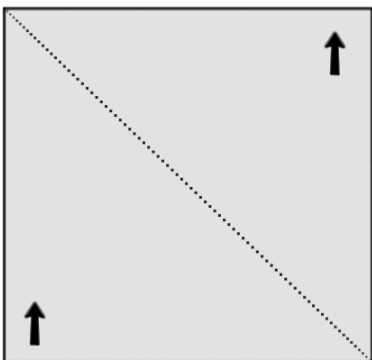
Which one of the following figures represents the reflection of the arrow on the diagonal ?



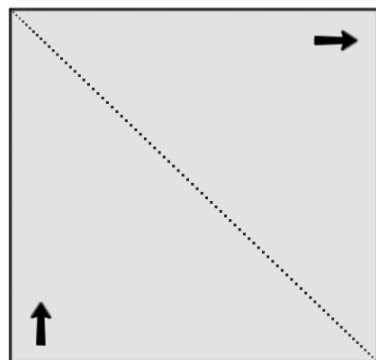
A



B

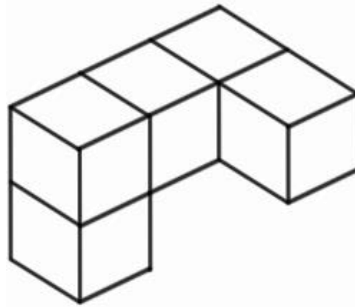


C

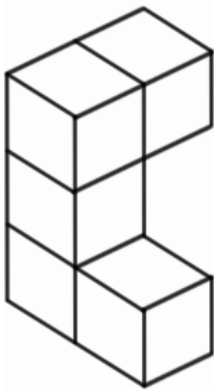


D

The diagram below represents a model made out of cubes.



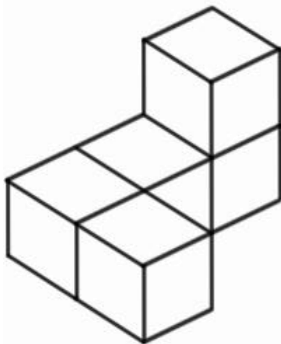
Which of the following is the same as the model above?



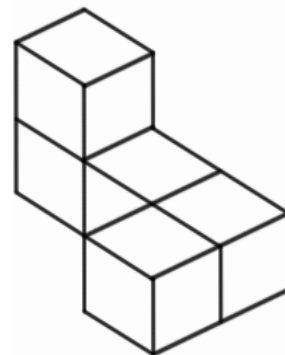
A



B

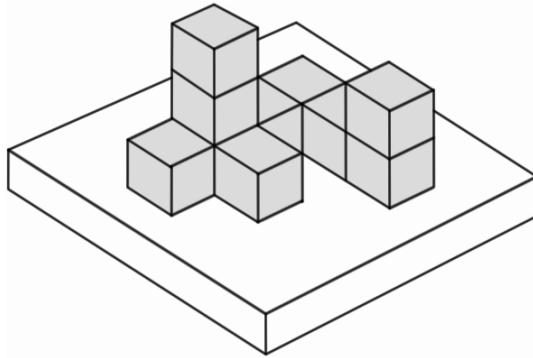


C

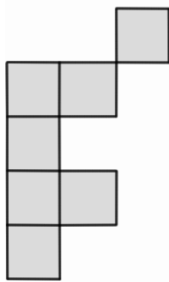


D

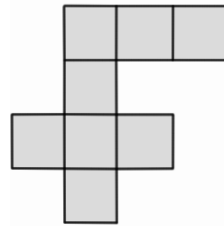
The diagram below represents a model made of cube blocks.



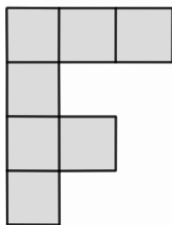
Which one of the following represents the model when viewed from above?



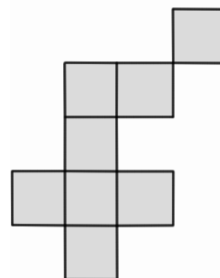
A



B

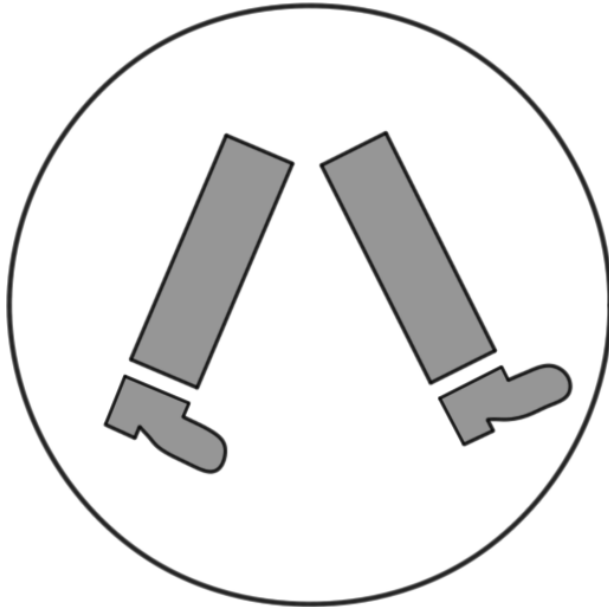


C



D

A pedestrian crossing sign is shown below.



How many lines of symmetry does the sign have ?

1

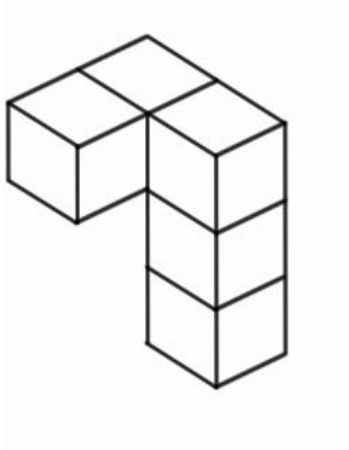
2

4

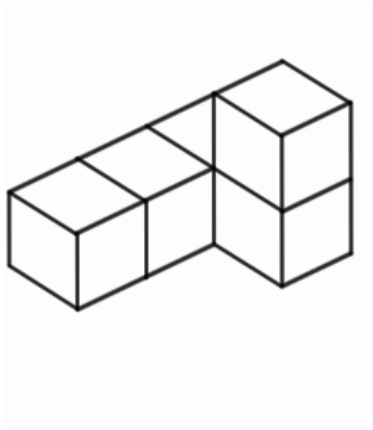
0



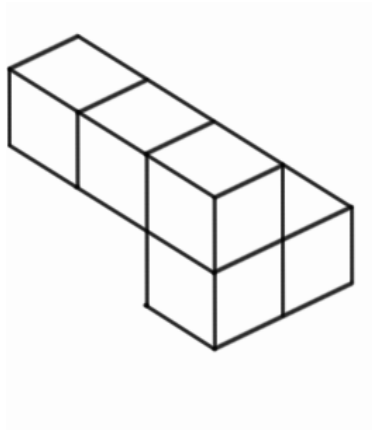
The diagram below represents a model made out of cubes.



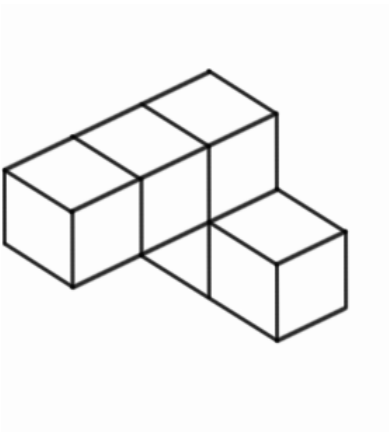
Which of the following is the same as the model above?



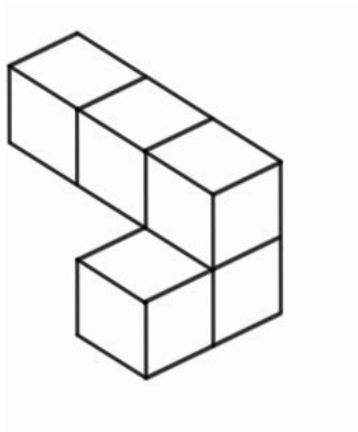
A



B

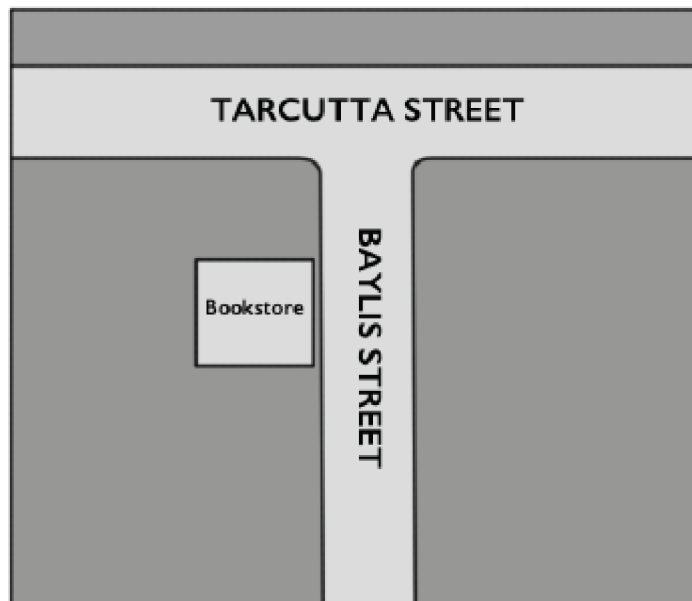


C

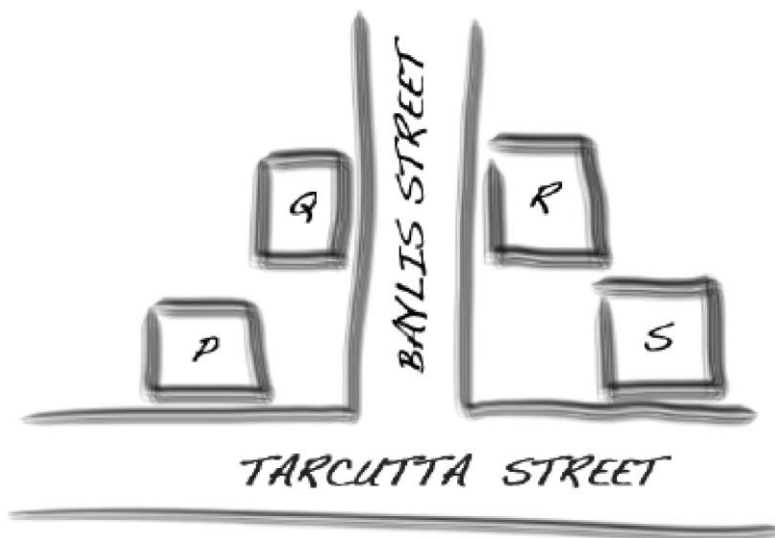


D

The map shows the location of a bookstore along Baylis Steet.



Jeff draws a sketch of the street as follows.



Which letter indicates the location of the bookstore on Jeff's sketch ?

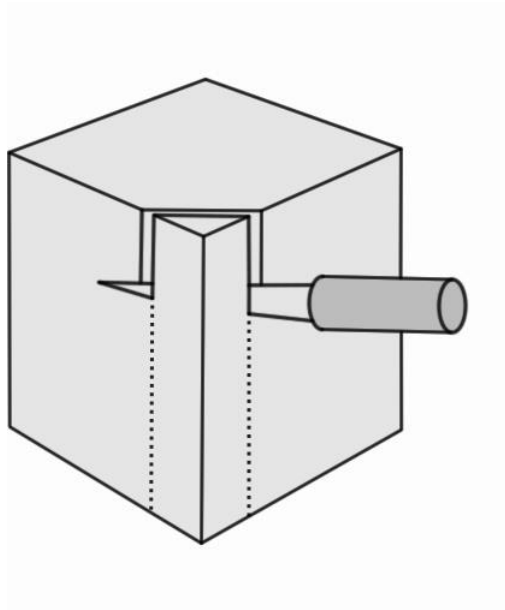
☐ A R

☐ B S

☐ C P

☐ D Q

The cube is cut along its edge as shown below.



Which one of the following figures represents the shape of the cut edge?



A



B

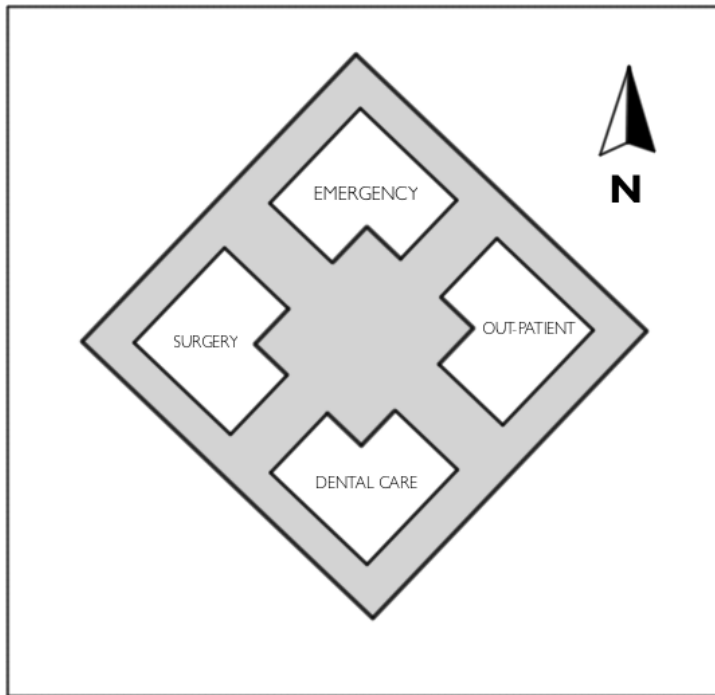


C

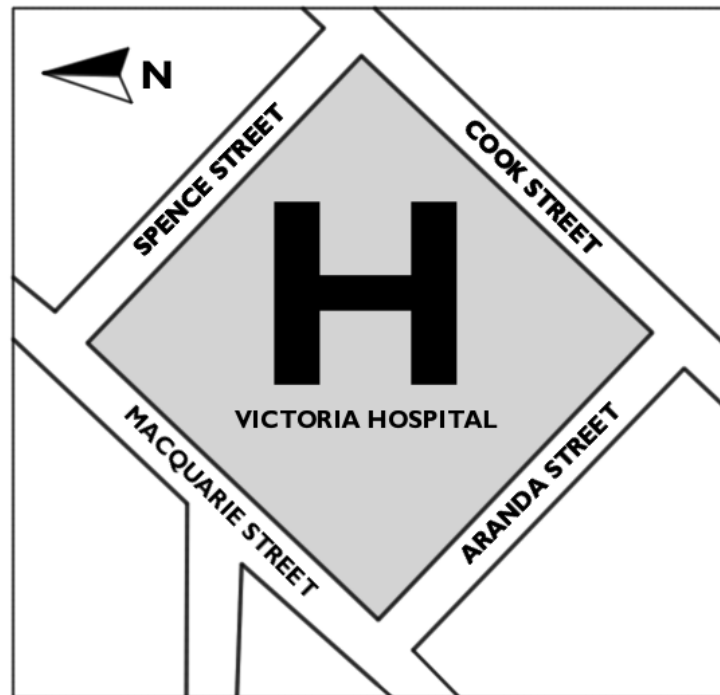


D

Two plans of Victoria hospital are shown below.



VICTORIA HOSPITAL - BUILDING MAP



VICTORIA HOSPITAL - STREET MAP

Which building is on the corner of Aranda street and Macquarie street?



EMERGENCY



DENTAL CARE

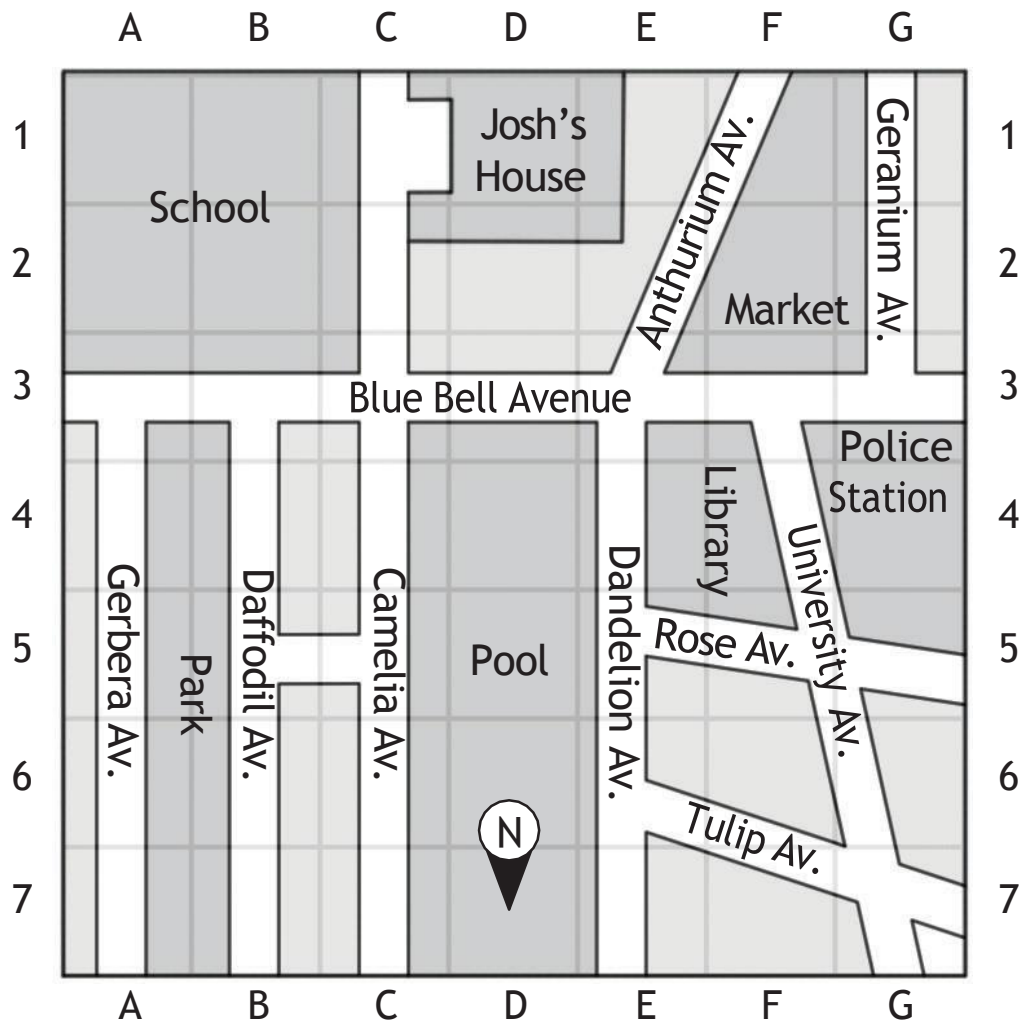


OUT-PATIENT



SURGERY

Josh leaves his house at location 1D. He drives north and takes the first road to his left, then the second road to his right.



Which road is Josh now on ?



University Av.



Geranium Av.

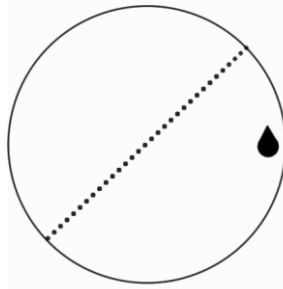


Gerbera Av.

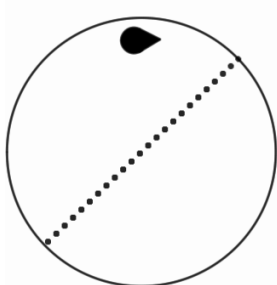


Daffodil Av.

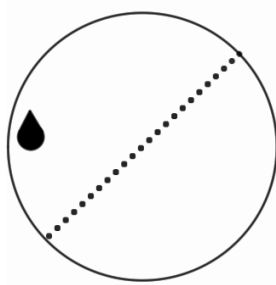
The diagram below represents a circular sheet of paper with an inclined line of symmetry and a design.



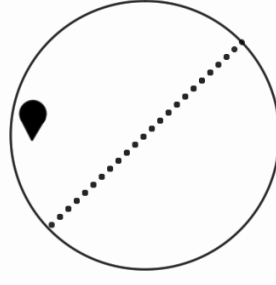
Which of the following figures represents the reflection of the design in the inclined line ?



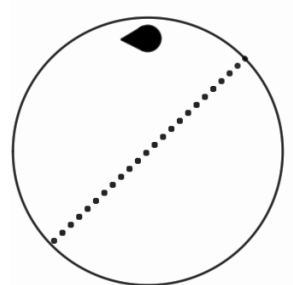
A



B



C



D