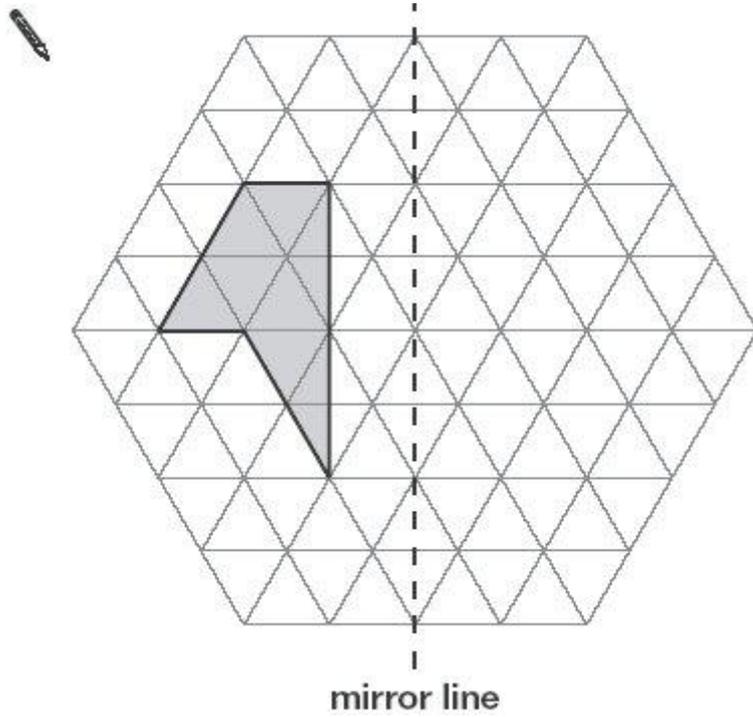
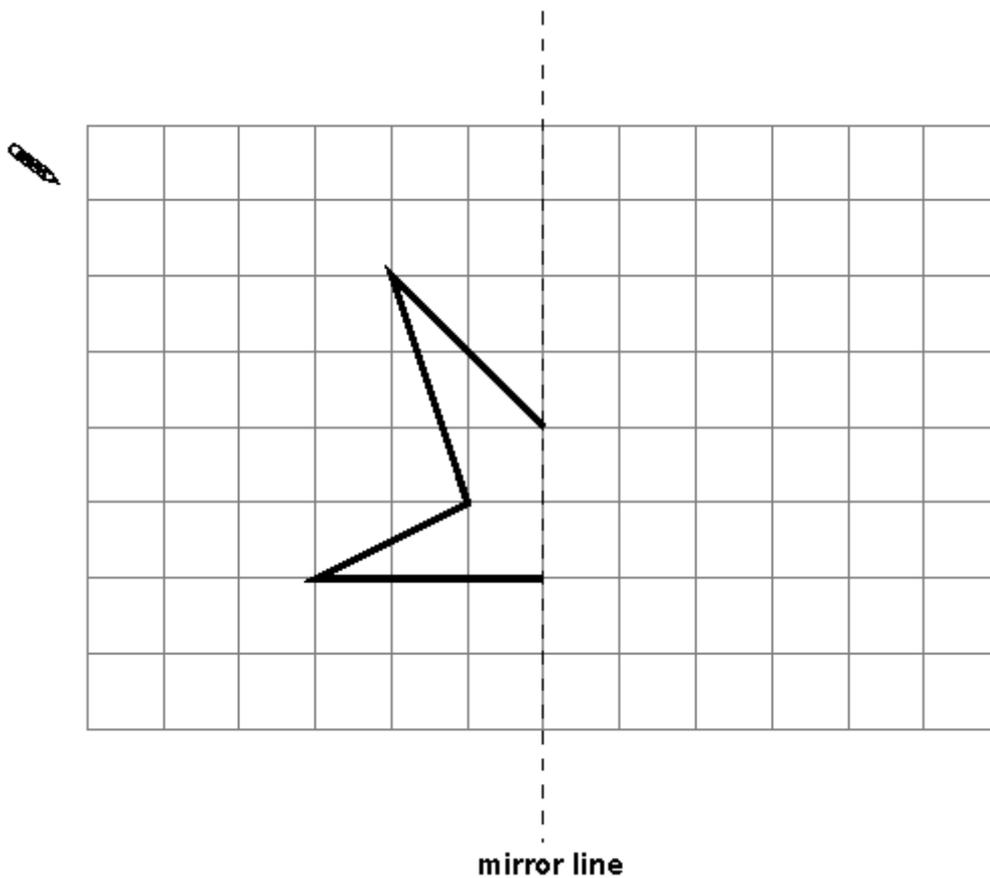


Q1. Draw the reflection of the shaded shape in the mirror line.

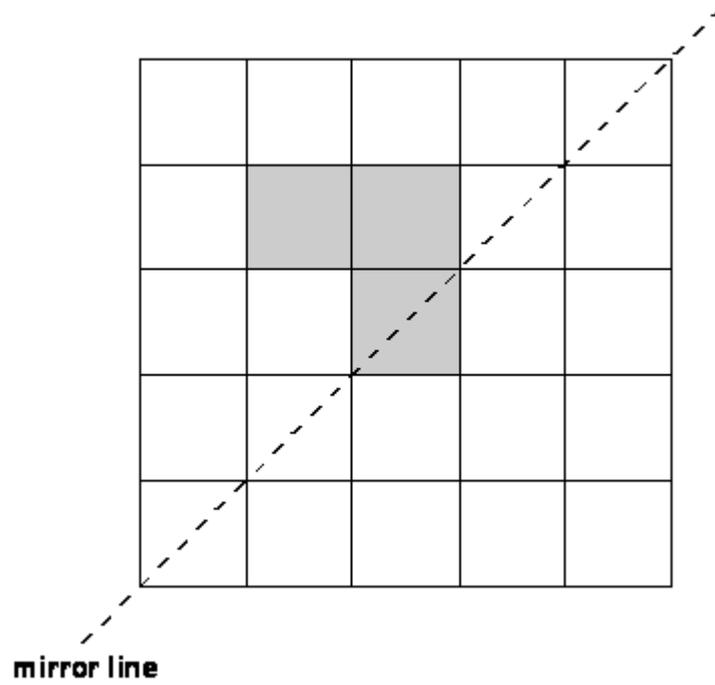


1 mark



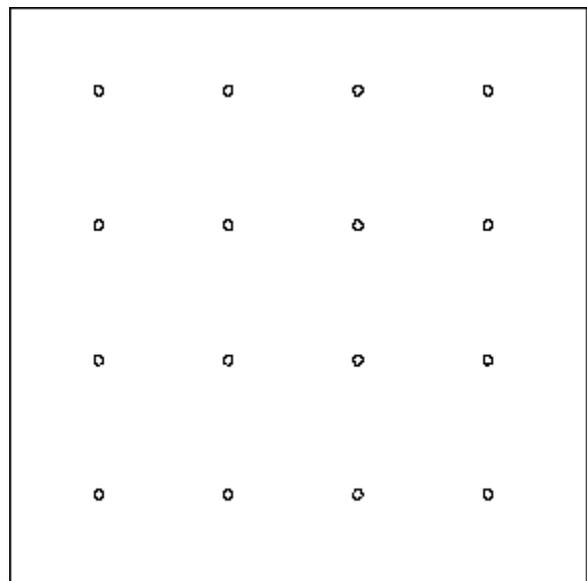
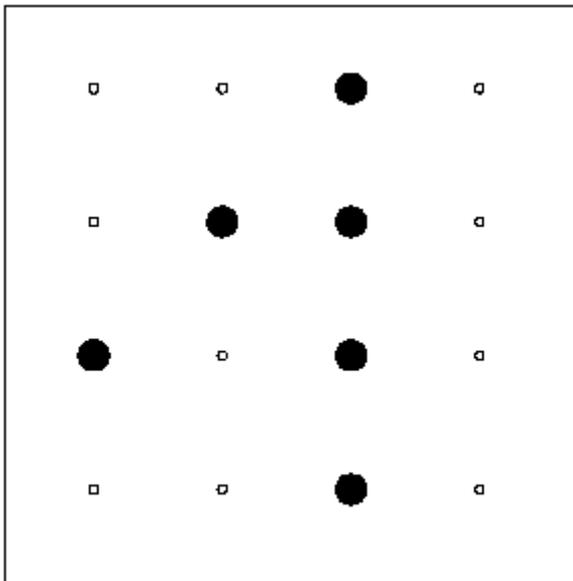
1 mark

Q3. Shade in **two more squares** to make this design symmetrical about the mirror line.



1 mark

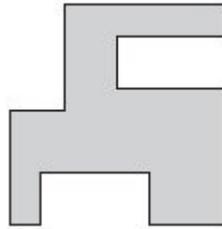
Q4. Karl puts **6 pegs** in a pegboard.



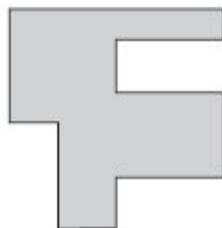
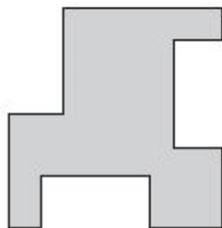
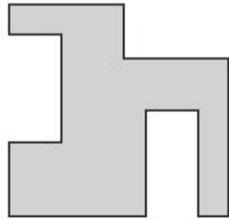
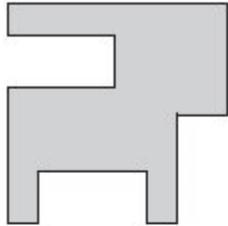
He turns the board through **1 right angle**.

1 mark

Q5. Here is a shape.



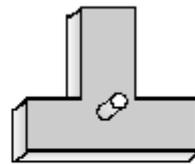
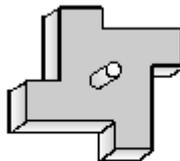
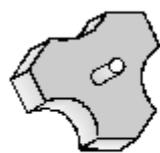
Put a tick (✓) on the shape below which is the same as the one above.



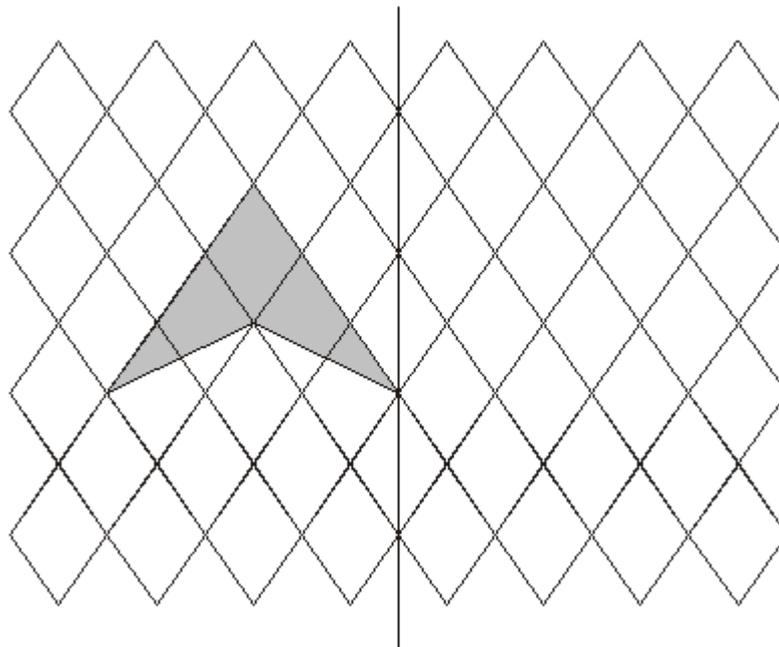
1 mark

Q6. Kim has a shape sorter toy.

How many different ways does each piece fit into its hole?

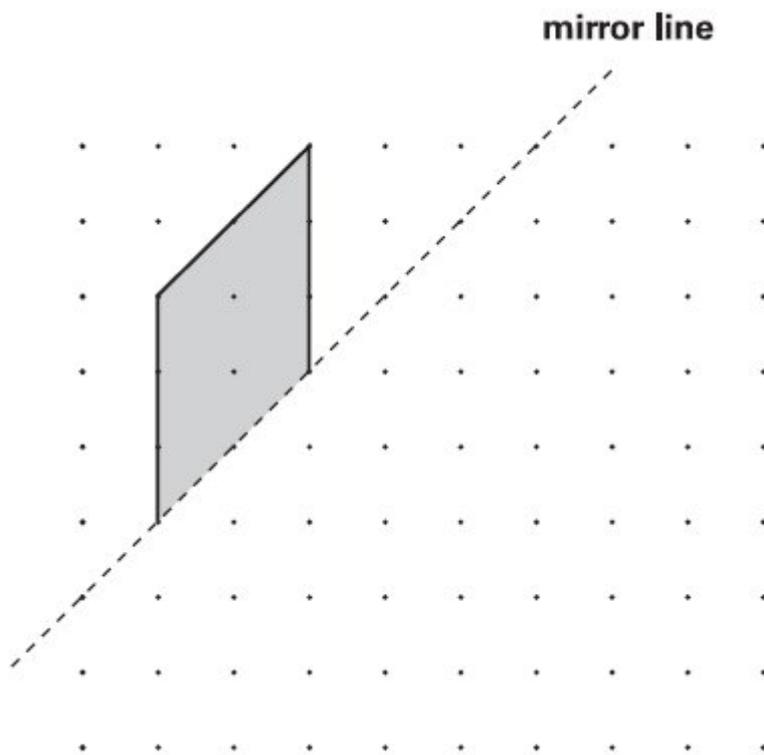


2 marks



mirror line

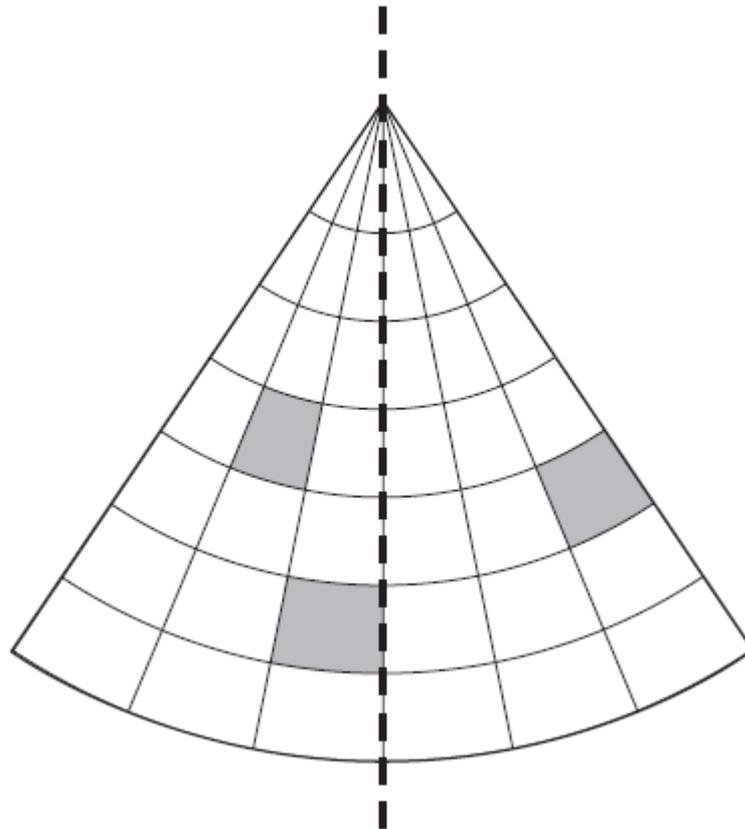
1 mark



mirror line

1 mark

Q9. Draw the reflection of **all** the shaded shapes in the mirror line.

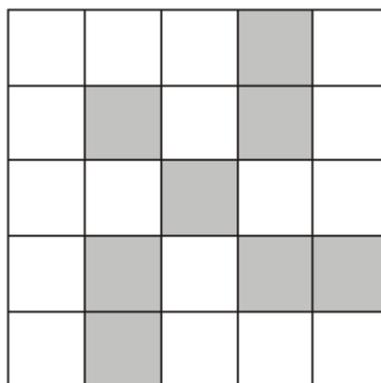


mirror line

1 mark

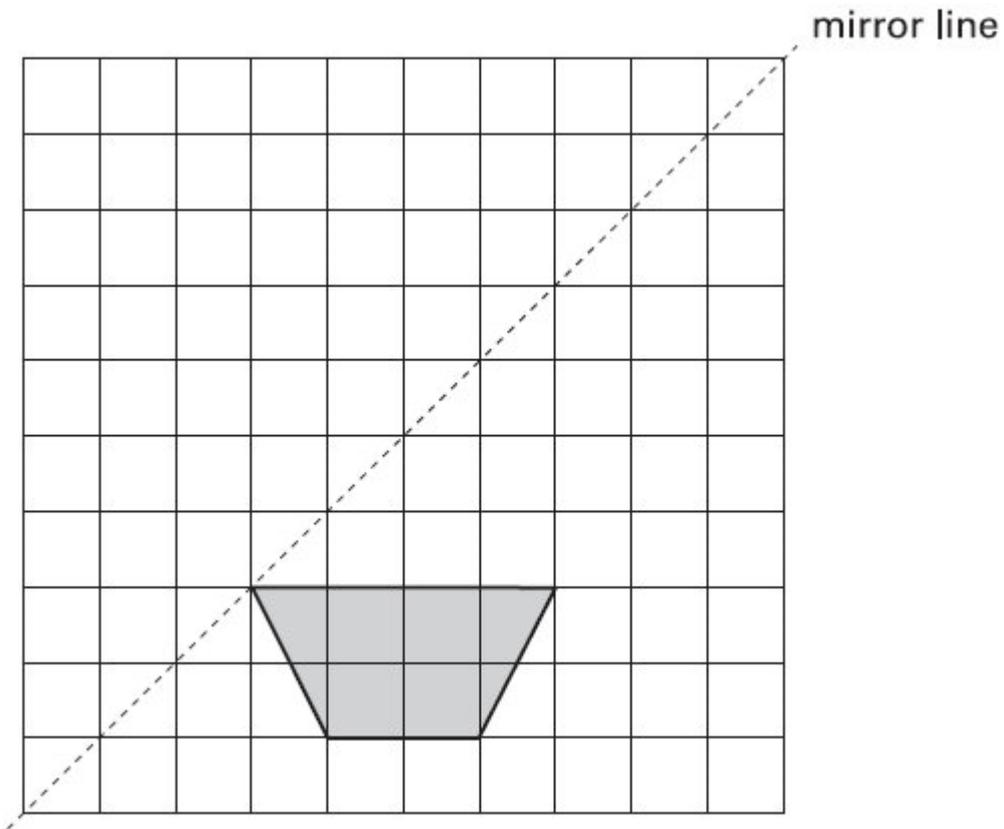
Q10. Shade in **one more** square so that this design has **rotational** symmetry of **order 4**.

You may use tracing paper



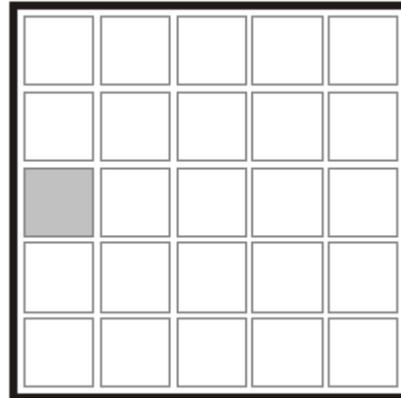
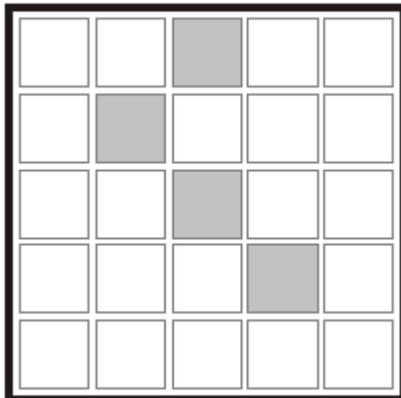
1 mark

Q11. Draw the reflection of this shape.



1 mark

Q12. Ben makes this design on a grid.



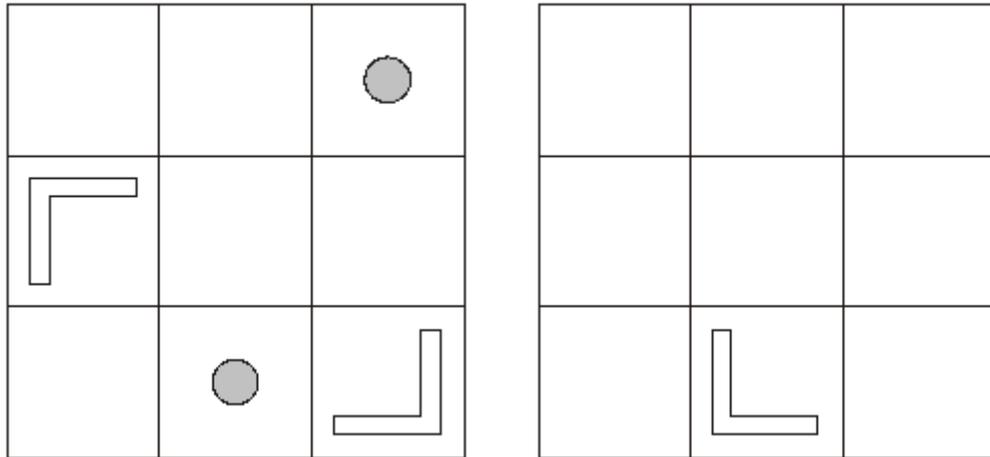
He rotates the grid to a new position.

Shade in the missing parts of the design.



1 mark

Q13. There are four shapes on this diagram.

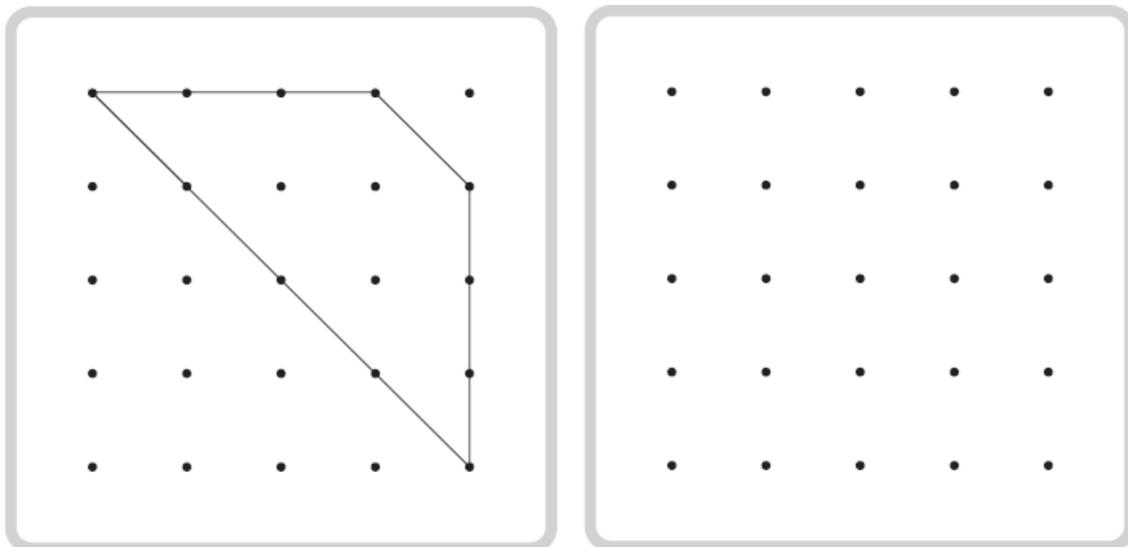


The diagram is turned to the new position below.

Draw the three missing shapes.



Q14. Kirsty draws this shape on a grid.



She turns her grid one quarter turn clockwise.

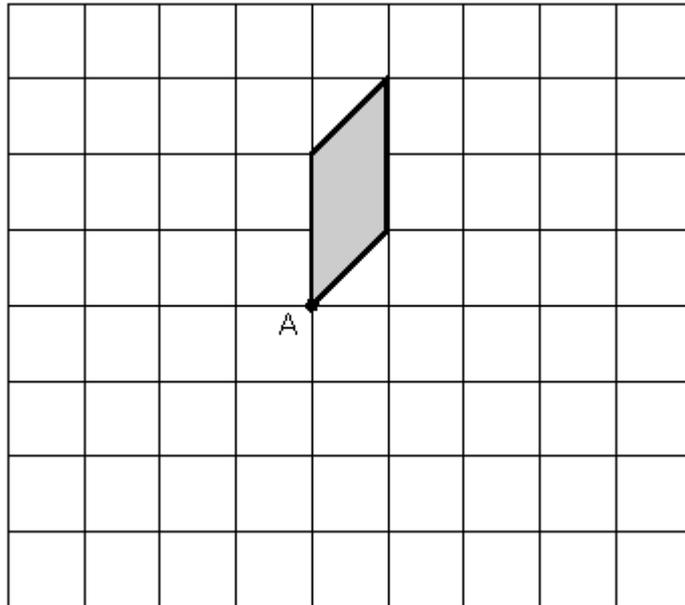
Draw the shape in its new position after the turn.

Use a ruler.

1 mark

The shape is **rotated 90° clockwise** about point **A**.

Draw the shape in its **new position** on the grid.



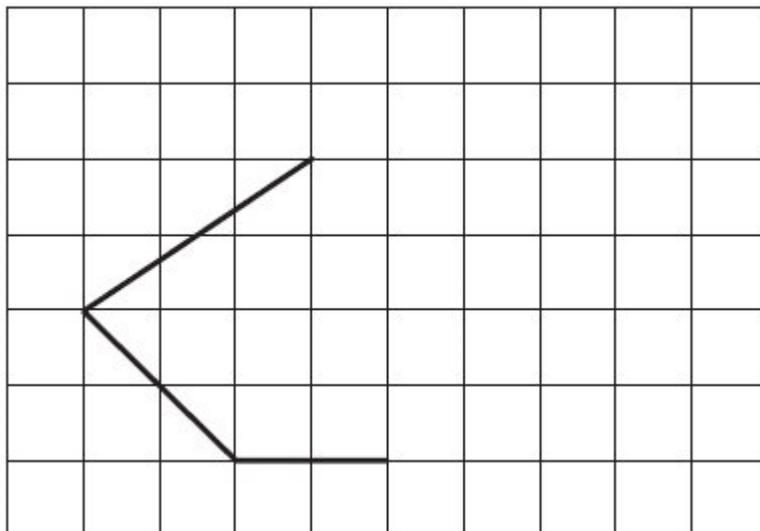
2 marks

Q16. Here is part of a shape on a square grid.

Draw **two more** lines to make a shape which has a line of symmetry.

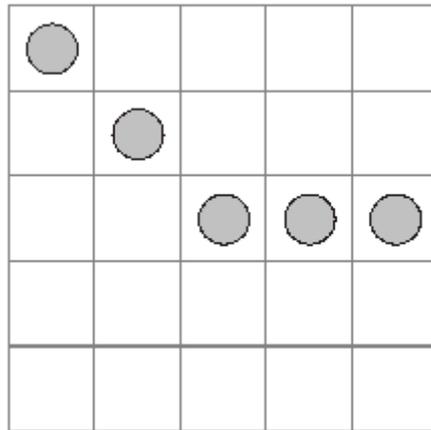
Use a ruler.

Handwritten mark



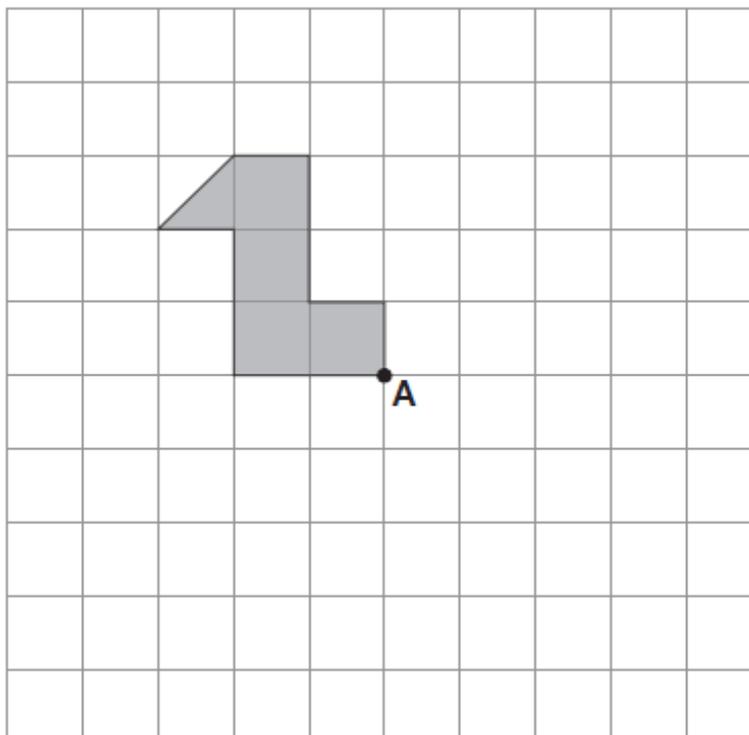
1 mark

Q17. Draw **two** more circles on this grid to make a design that has a line of symmetry.



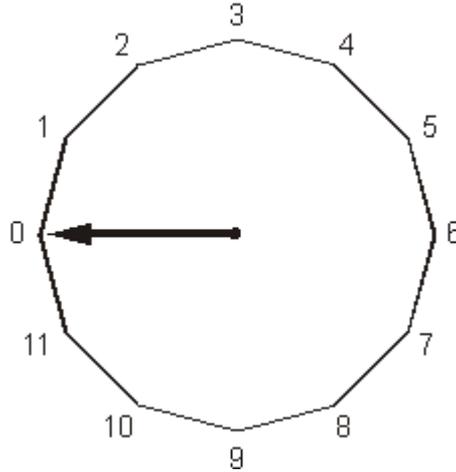
The shape is rotated 180° about point A.

Draw the shape in its new position on the grid.



2 marks

Q19. This regular 12-sided shape has a number at each vertex.



Ben turns the pointer from zero, clockwise through 150°

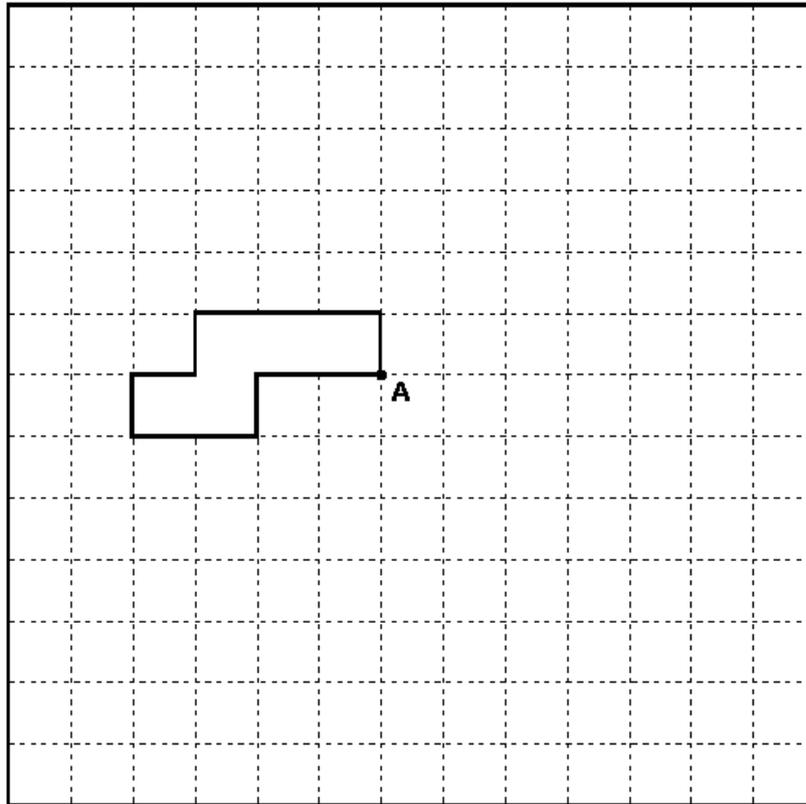
Which number will the pointer now be at?

1 mark

Nisha turns the pointer clockwise from number 2 to number 11

Through how many degrees does the pointer turn?

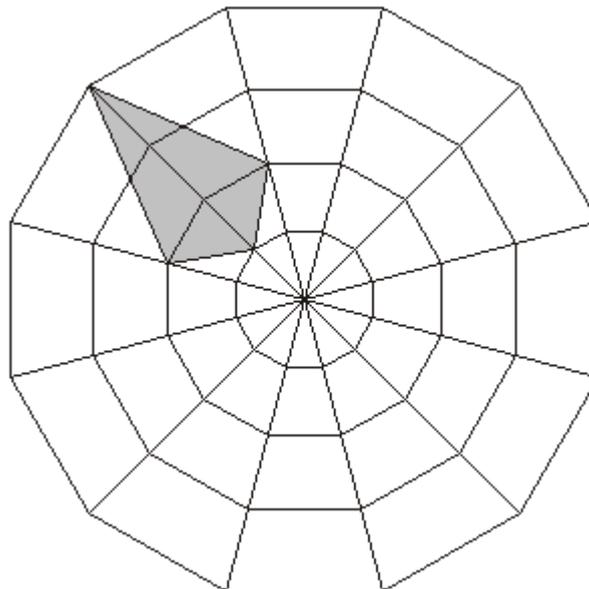
1 mark



2 marks

Turn it through **one right angle** around the point **A**.

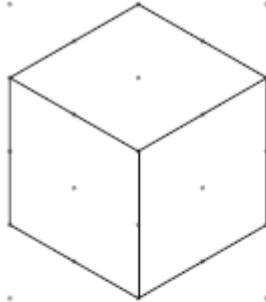
Jamie rotates the shape 90° **clockwise** about the centre of the grid.



2 marks

Draw a cuboid that has:

- the **same** volume
- **half** the height.



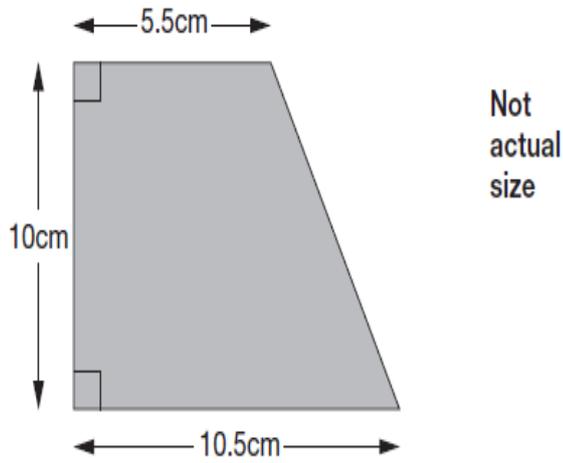
2 marks

On a sheet of isometric paper, draw a cuboid that has a volume of 24 cm^3 .

On a sheet of isometric paper, draw a cube that has a surface area of 96 cm^2 .

On a sheet of isometric paper, draw a cuboid that has a volume of 245 cm^3 and a surface area of 238 cm^2 .

Here is a trapezium with a height of 10 centimetres.



Find the **area** of the trapezium.



Show your method

cm²

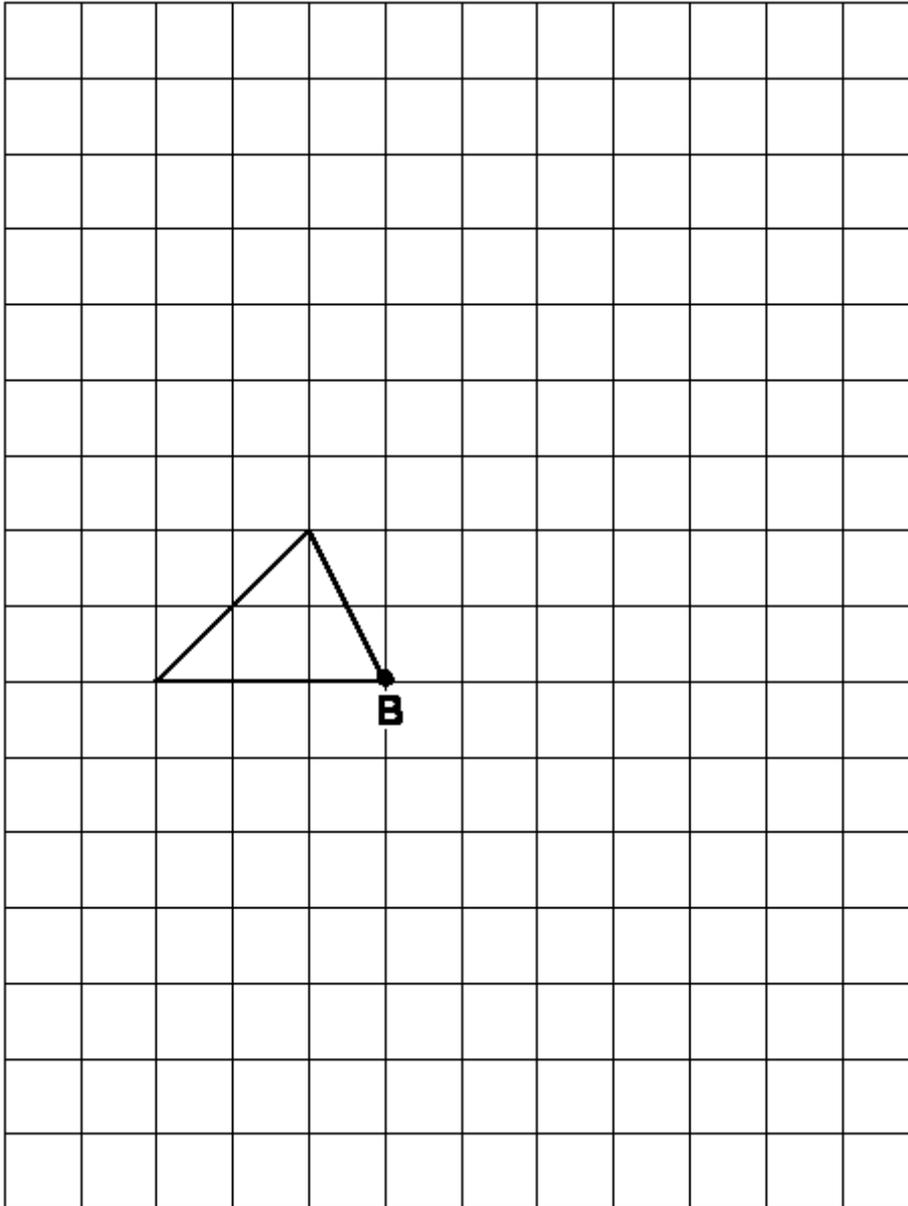
2 marks

Q24. Here is a shape on a square grid.

The shape is rotated **90° clockwise** about point **B**
and enlarged by a **scale factor of 2**

Use a ruler to draw the enlarged shape in its new position.

Handwritten mark



2 marks