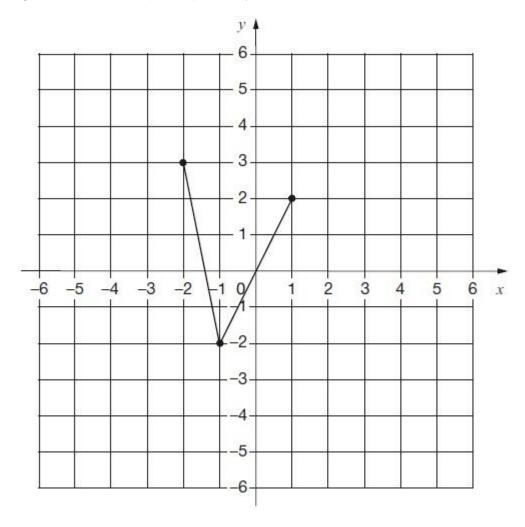
Q1.

On the grid there are three points joined by two lines.



Lara plots another point on the grid at (-1, 2).

She joins the points to make a quadrilateral.

Complete Lara's quadrilateral on the grid. Use a ruler.

1 mark

Then Lara translates the quadrilateral 4 squares to the right.

Draw the quadrilateral in its new position on the grid.

1 mark

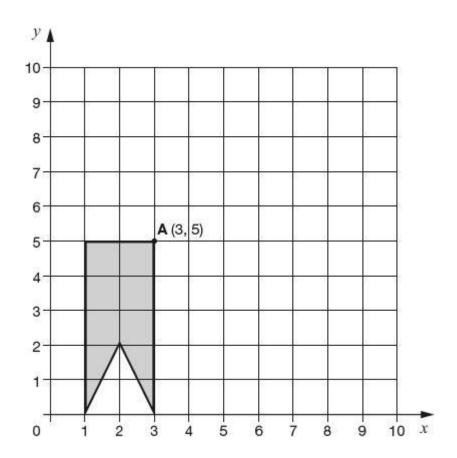
Q2.

Here is a shape on a grid.

The shape is translated so that point **A** moves to (7, 8).

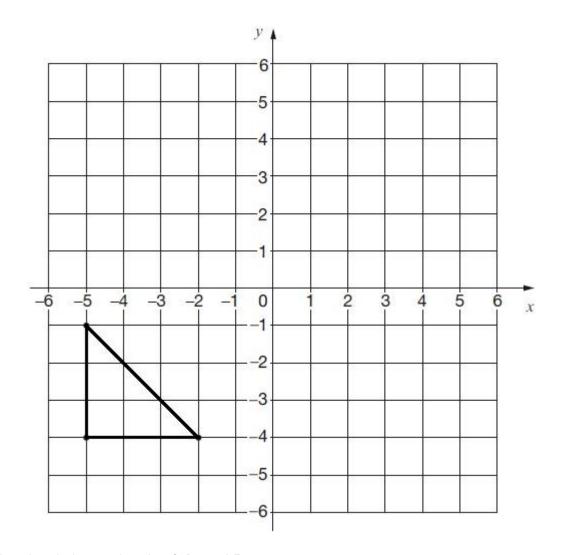
Draw the shape in its new position.

Use a ruler.



Q3.

Here is a triangle drawn on a coordinate grid.



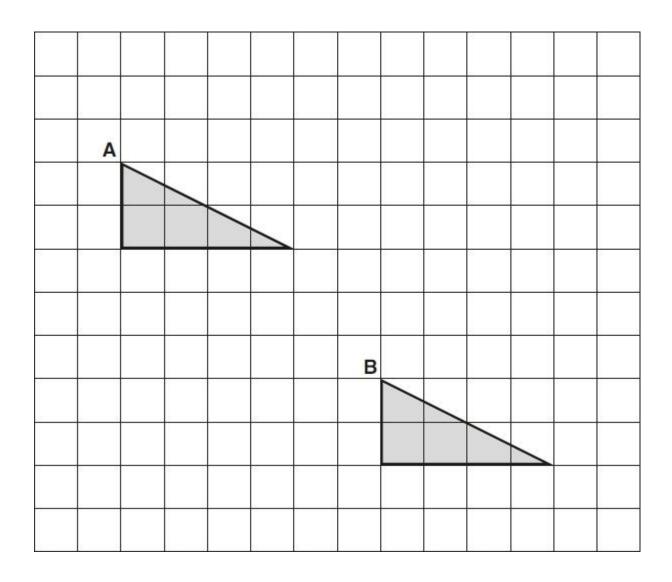
The triangle is translated **7 right** and **5 up**.

Draw the triangle in its new position.

1 mark

Q4.

A triangle is translated from position ${\bf A}$ to position ${\bf B}$.



Complete the sentence.

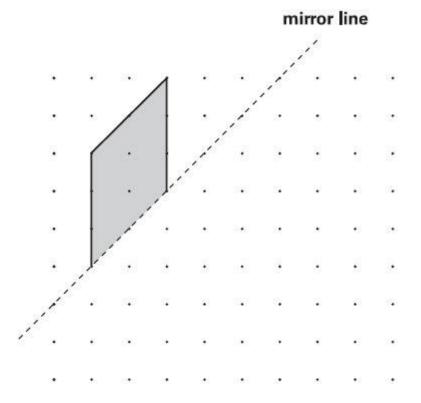
| The triangle has moved | 3 | squares to the right |
|------------------------|---|----------------------|
| and | | squares down. |

1 mark

Q5.

Draw the **reflection** of the shape in the **mirror line**.

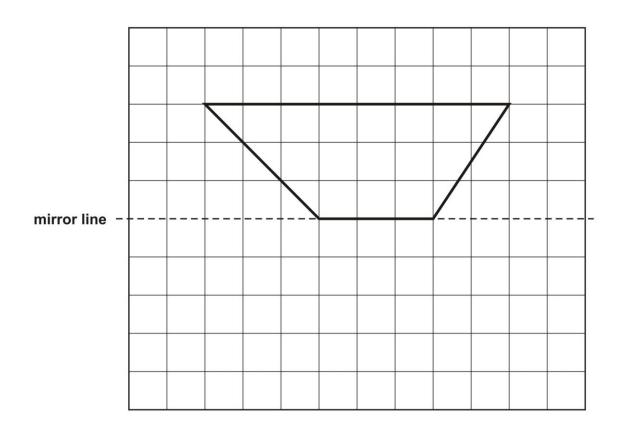
Use a ruler.



Q6.

Complete the diagram below to make a shape that is symmetrical about the mirror line.

Use a ruler.

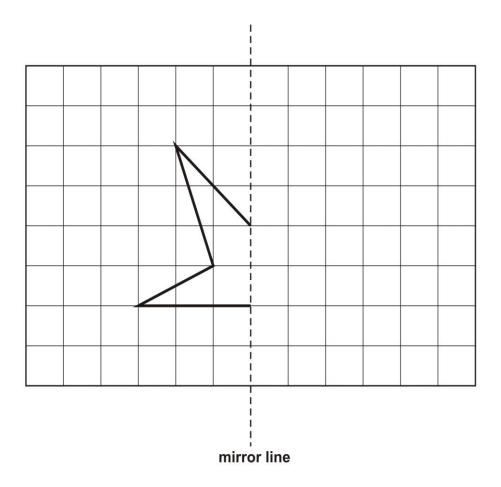


1 mark

Q7.

Complete the diagram below to make a shape that is symmetrical about the mirror line.

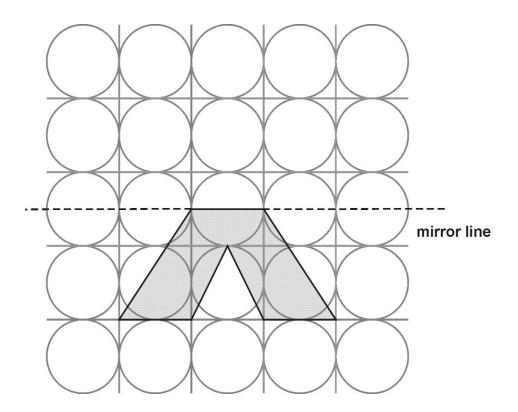
Use a ruler.



1 mark

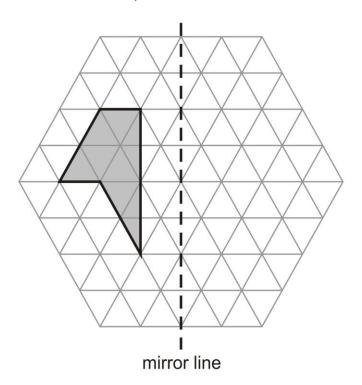
Q8.

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



Q9.

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



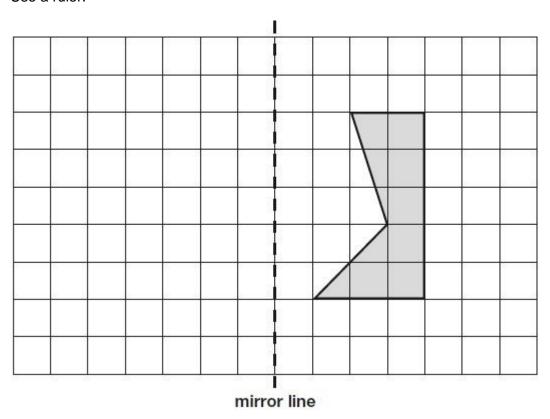
1 mark

Q10.

Here is a shaded shape on a square grid.

Reflect the shape in the mirror line.

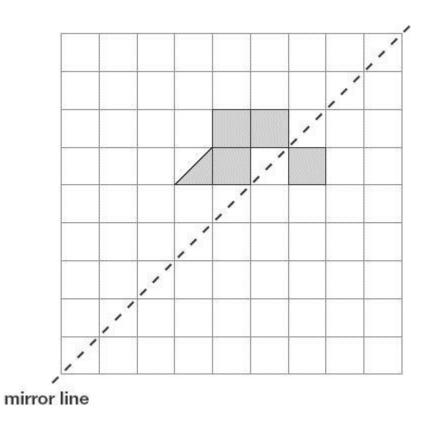
Use a ruler.



1 mark

Q11.

Shade **two** squares and **one** triangle to make this design symmetrical about the mirror line.



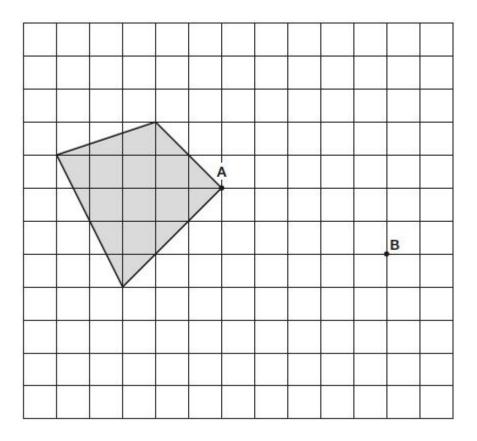
Q12.

Here is a shaded shape on a grid.

The shape is translated so that point **A** moves to point **B**.

Draw the shape in its new position.

Use a ruler.



2 marks

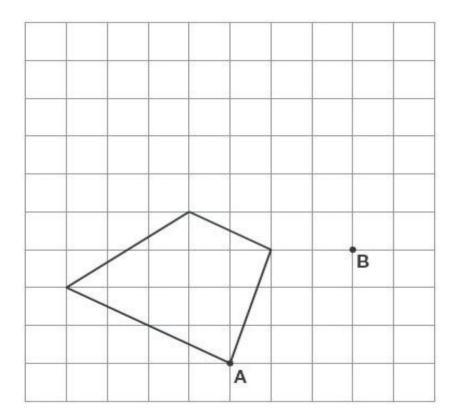
Q13.

Here is a quadrilateral on a square grid.

The quadrilateral is translated so that point **A** moves to point **B**.

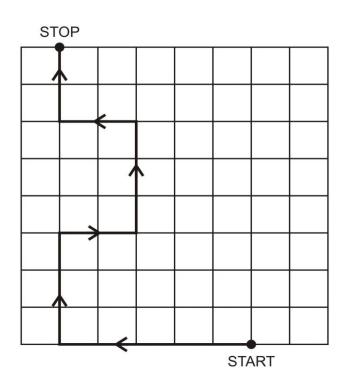
Draw the quadrilateral in its new position.

Use a ruler.



Q14.

Follow this route with your pencil.



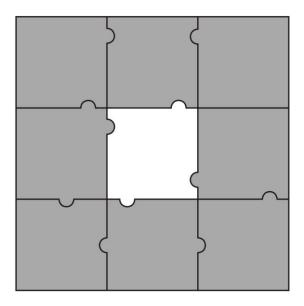
Complete this chart showing the route from START to STOP.

START

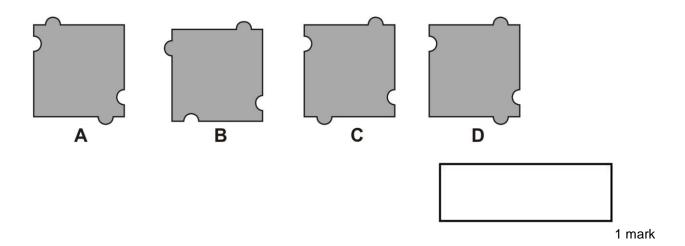
| left 5 | | |
|---------|--|--|
| up 3 | | |
| right 2 | | |
| | | |
| | | |
| | | |
| | | |
| STOP | | |

Q15.

Here is a jigsaw with one piece **missing**.

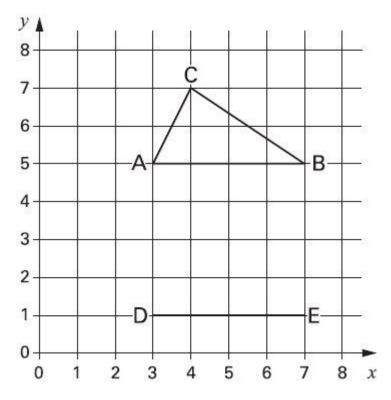


Which one of the pieces below fits the hole in the middle?



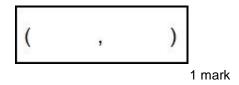
Q16.

Kyle has drawn triangle **ABC** on this grid.



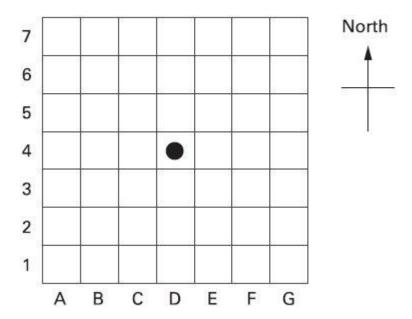
Holly has started to draw an identical triangle DEF.

What will be the coordinates of point **F**?



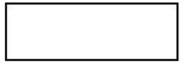
Q17.

Lisa places a counter on square D4



She moves it 2 squares east and 3 squares south.

Write the position of the square she moves it to.



1 mark

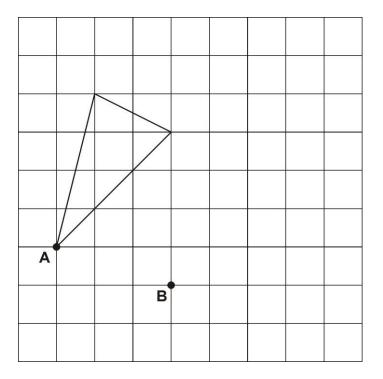
Q18.

Here is a triangle on a square grid.

The triangle is translated so that point **A** moves to point **B**.

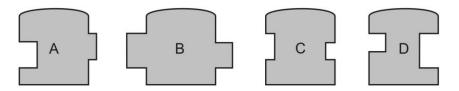
Draw the triangle in its new position.

Use a ruler.



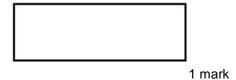
Q19.

Here are four shapes.



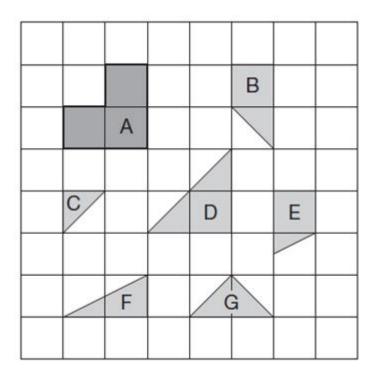
They can be fitted together in a straight line so that there are no gaps between them.

Write the order of the letters of the shapes when they all fit together.



Q20.

Here are some tiles on a square grid.



Three different tiles can be fitted together without overlapping to make a shape identical to tile ${\bf A}$.

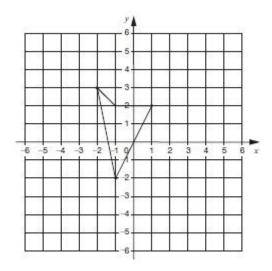
Write the letters of the three tiles.

| | and | and |
|------------|-----|-----|
| 1 mark | | |

Mark schemes

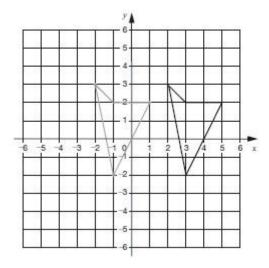
Q1.

(a) Quadrilateral completed, as shown:



Accept slight inaccuracies in drawing provided the intention is clear.

(b) Quadrilateral translated correctly, as shown:



Accept slight inaccuracies in drawing provided the intention is clear.

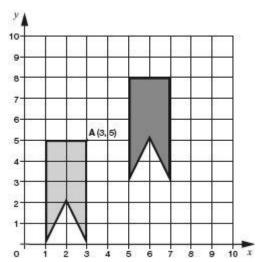
Award **ONE** mark if the answer to (b) is a quadrilateral with sides drawn and is a correct translation of their answer to (a).

1

[2]

Q2.

Shape located correctly, as shown:

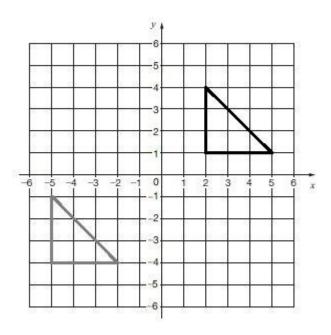


Accept slight inaccuracies in drawing (see guidance). Shape need not be shaded for the award of **ONE** mark.

[1]

Q3.

Triangle with vertices at (2,1) AND (2,4) AND (5,1) drawn on the grid as shown:



Accept slight inaccuracies in drawing

[1]

Q4.

The triangle has moved 6 squares to the right and 5 squares down.

[1]

Q5.

Diagram completed as shown:



Accept slight inaccuracies in drawing, provided the intention is clear.

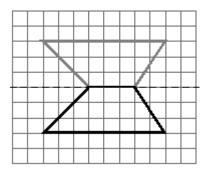
Vertices must be within 2 mm of the correct grid points.

The reflection need not be shaded.

[1]

Q6.

Diagram completed as shown:

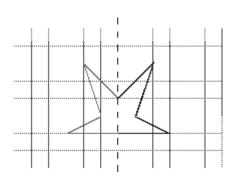


Accept slight inaccuracies in drawing provided the intention is clear.

[1]

Q7.

Diagram completed correctly as shown:

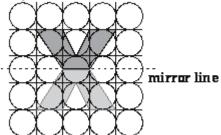


Accept slight inaccuracies in drawing, provided the intention is clear.

[1]

Q8.

Diagram completed as shown:

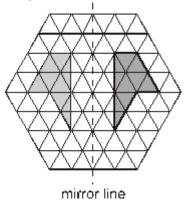


Accept slight inaccuracies in drawing. Shape need not be shaded.

[1]

Q9.

Diagram completed as shown:

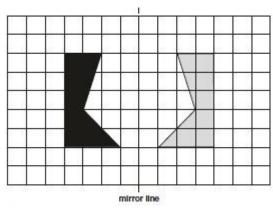


Accept slight inaccuracies in drawing Shape need not be shaded.

[1]

Q10.

Diagram completed, as shown:



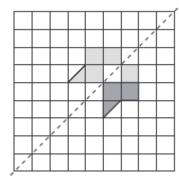
Accept slight inaccuracies in drawing.

Shape need not be shaded for the award of **ONE** mark.

[1]

Q11.

Diagram completed as shown:



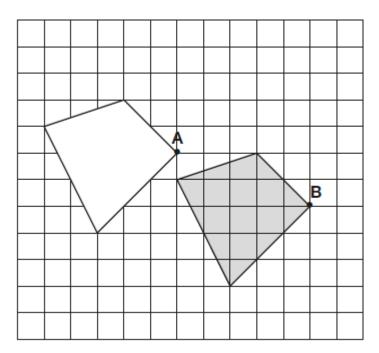
mirror line

Accept inaccurate drawing provided the intention is clear.

[1]

Q12.

Award **TWO** marks for three vertices of the shape, excluding B, translated correctly as shown below:



If the answer is incorrect, award **ONE** mark for two vertices, excluding B, translated correctly.

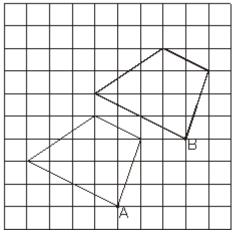
Accept slight inaccuracies in drawing provided intention is clear.

Up to 2

[2]

Q13.

Diagram completed as shown:



Accept slight inaccuracies in drawing

[1]

Q14.

up 3

left 2 up 2

All correct for 1 mark.

[1]

Q15.

С

Accept alternative, unambiguous indications of the answer such as a cross on shape C or a line from C to the hole.

[1]

Q16.

(4, 3)

Coordinates must be written in the correct order.

Accept (6, 3), (4, -1) or (6-1)

Accept answers written on the diagram, with or without brackets and commas.

[1]

Q17.

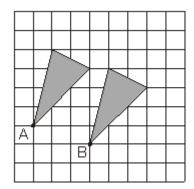
F1

Do not accept 1F.

[1]

Q18.

Diagram completed as shown:



Accept slight inaccuracies in drawing (see page 3 for guidance).

[1]

Q19.

DBAC

Accept C A B D.

[1]

U1

Q20.

B AND C AND G

Letters may be given in any order.

U1 [1]