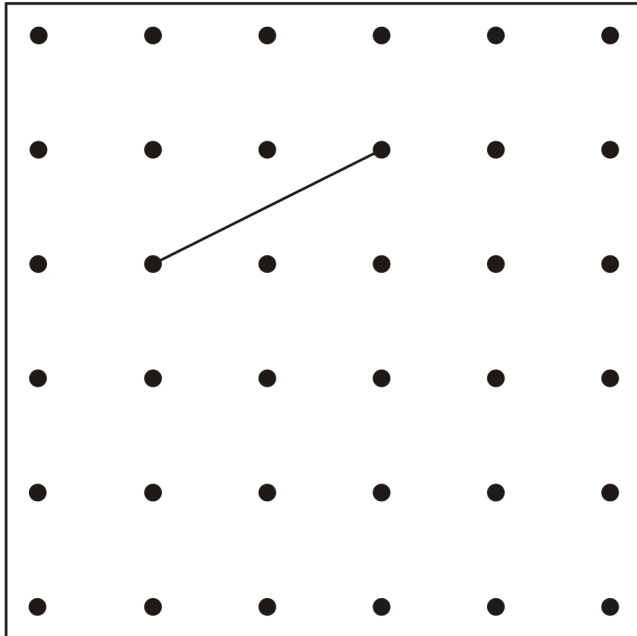


1

The line on the grid is one side of a **square**.

On the grid, draw the **other three sides** of the square.

Use a ruler.

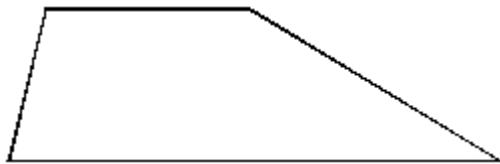


1 mark

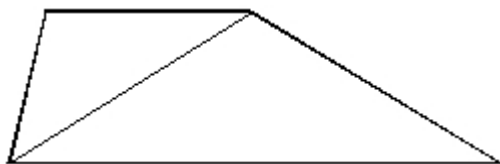
2

### Making shapes

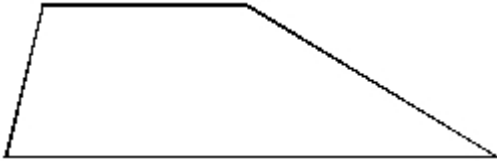
Look at this quadrilateral.



You can draw **one line** on the quadrilateral to make **two triangles**.

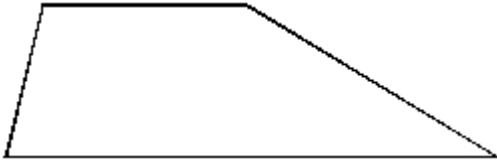


- (a) Use a ruler to draw a line in a **different** place on the quadrilateral to make **two triangles**.



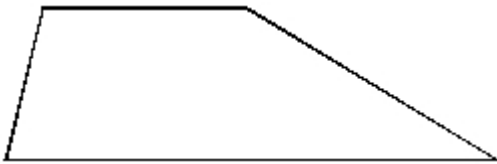
1 mark

- (b) Now draw **one line** on the quadrilateral to make a **quadrilateral and a triangle**.



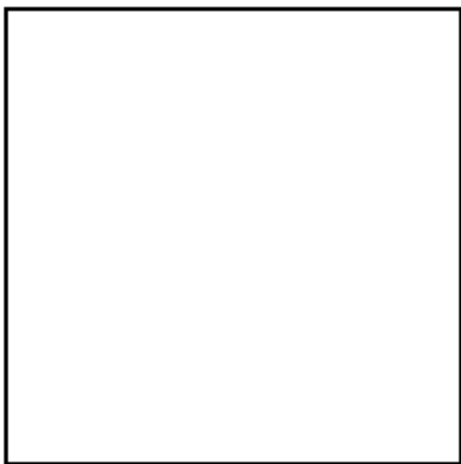
1 mark

- (c) Now draw **one line** on the quadrilateral to make **two quadrilaterals**.



1 mark

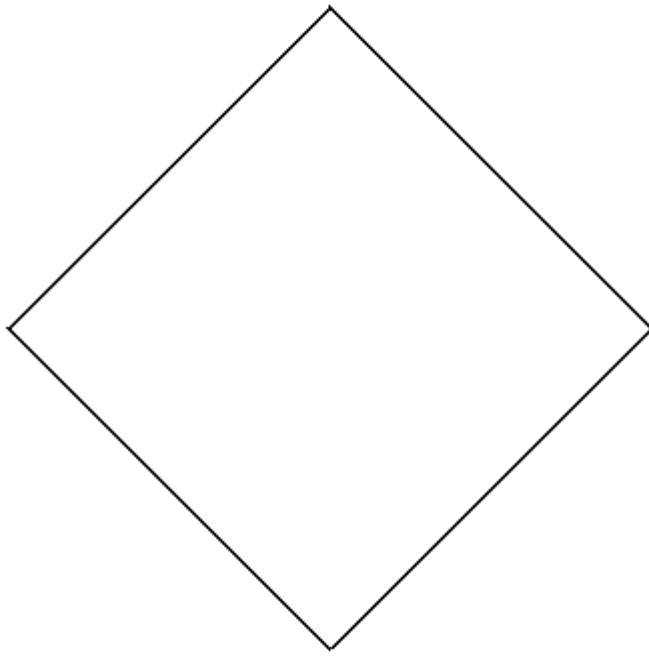
- (d) Draw **two lines** on the square below to make **four triangles** that are all the **same size**.



1 mark

(e) Now draw **two lines** on the square below to make **four squares** that are all the **same size**.

Use a ruler and draw the squares accurately.



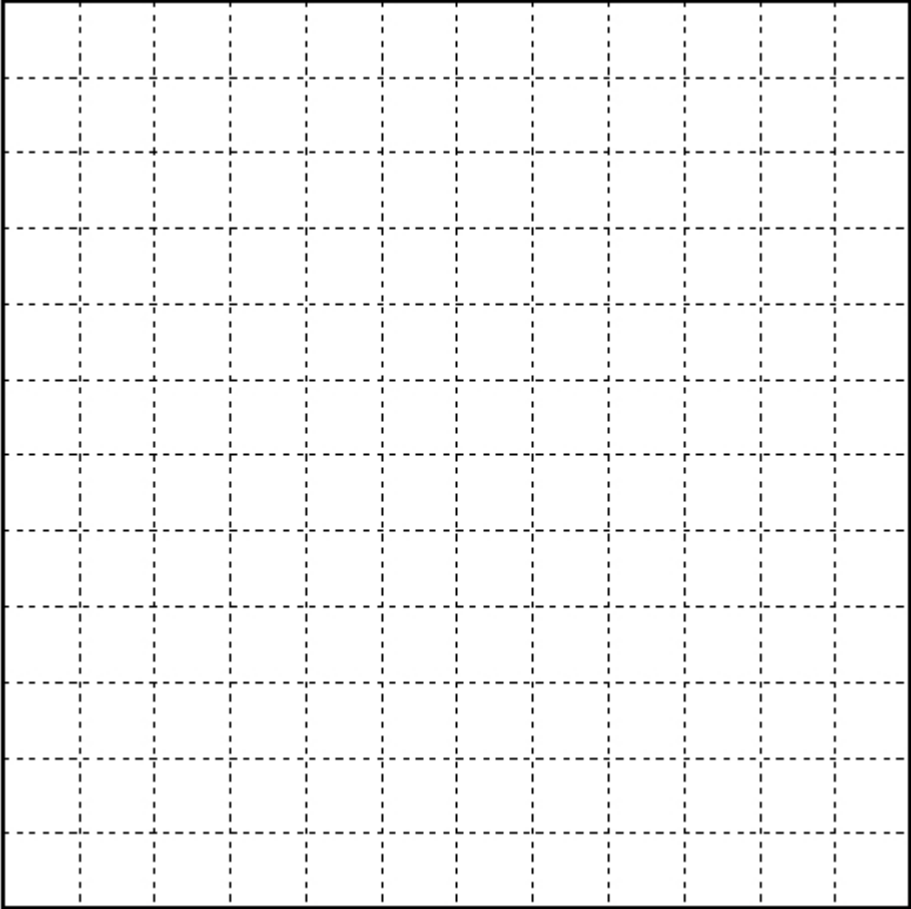
1 mark

3

Here is a grid of centimetre squares.

On the grid draw a **quadrilateral**.

It must have **only one** pair of parallel sides.

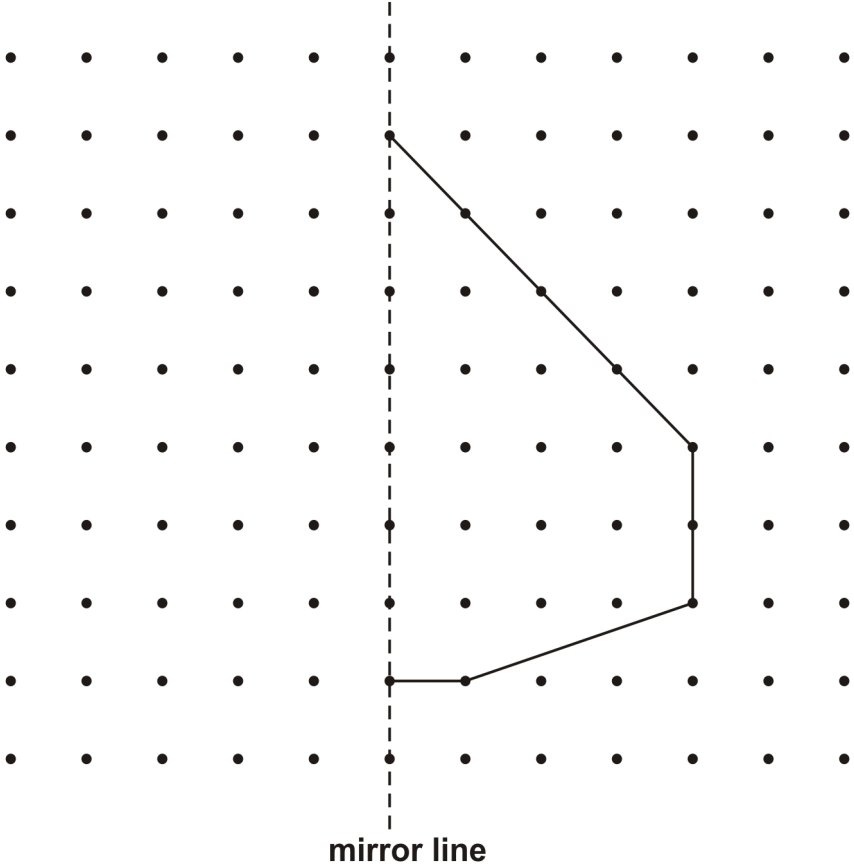


1 mark

4

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

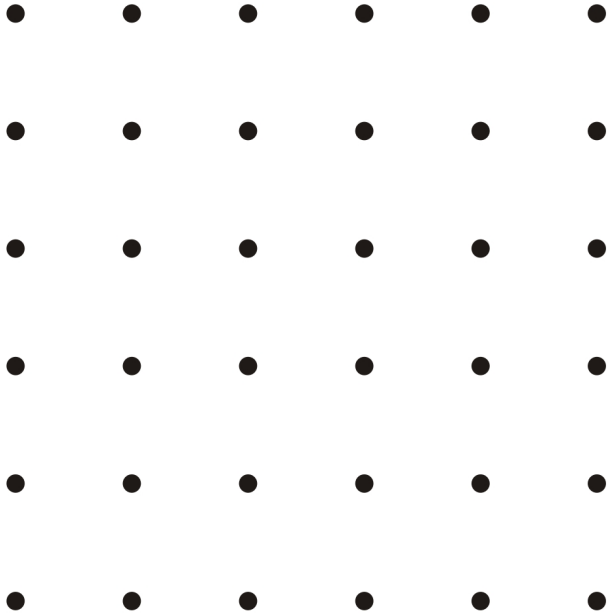
You may use a mirror and tracing paper.



1 mark

5

Use the dots to draw a shape that has **4 straight sides** and **no right angles**.

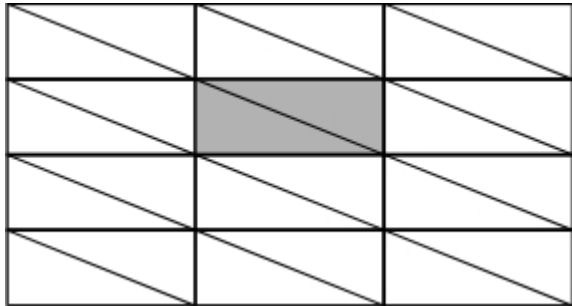


1 mark

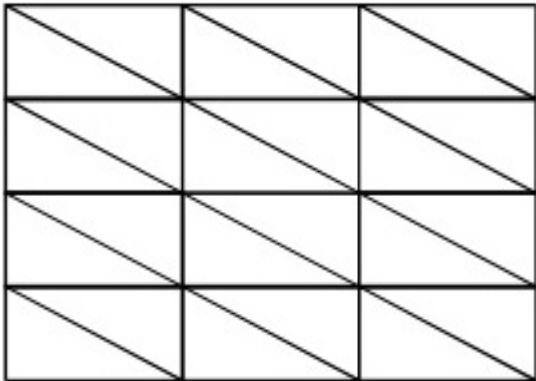
**6**

**Shapes**

Mike has a triangle grid.  
He shades in **2 triangles** to make a shape with **4 sides**.

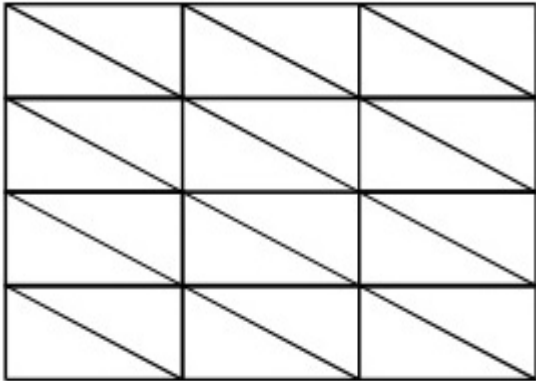


(a) Shade in **2 triangles** on this grid to make a **different** shape with 4 sides.



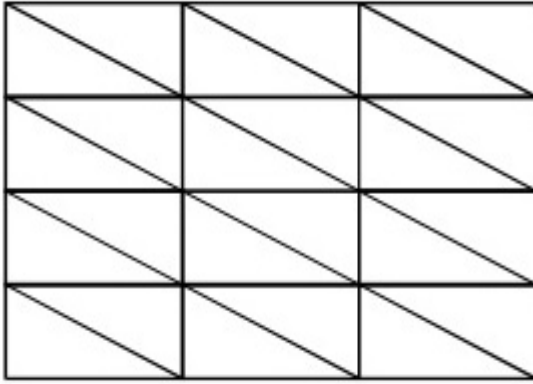
1 mark

(b) Shade in **2 triangles** on this grid to make another **different** shape with 4 sides.



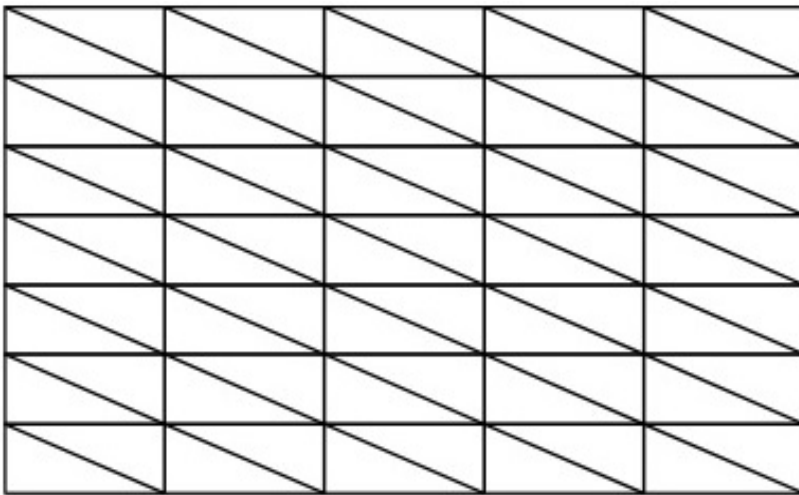
1 mark

- (c) Shade in **4** small triangles on this grid to make a **bigger triangle**.



1 mark

- (d) Shade in **more than 4** small triangles on this grid to make a **bigger triangle**.

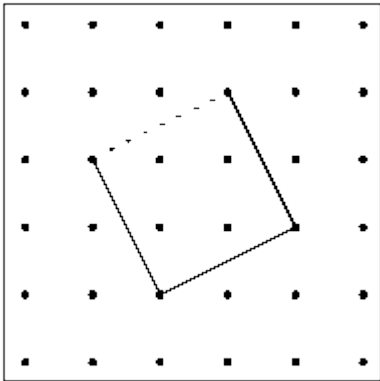


1 mark

## Mark schemes

1

Completion of the diagram as shown.



*Lines must be drawn to within 2mm of the correct dots.*

*Three lines must be drawn for the award of the mark.*

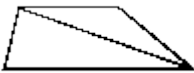
**Do not** penalise drawings done without a ruler, provided the intention is clear.

**No** mark is awarded for a square which goes outside the given grid.

[1]

2

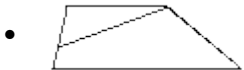
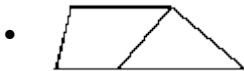
(a)



*Do not accept for part (a), the example repeated*

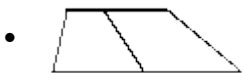
1

(b) A line through a vertex and a side, eg



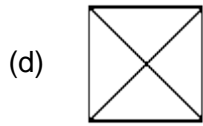
1

(c) A line through opposite sides, eg



1





! Line not ruled but intention clear

**In parts (a) to (d), penalise only the first occurrence.**

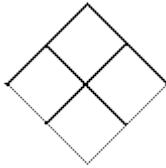
! Line not drawn accurately

Accept lines to a vertex to  $\pm 2m$ .

However, lines to a side must be unambiguously to a side rather than to a vertex, hence lines that are within  $\pm 2m$  of a vertex.

1

(e) Four congruent squares, each midpoint and line within  $\pm 2m$ , and ruled, ie



1

[5]

3

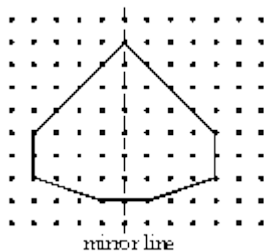
Award **ONE** mark for a 4-sided shape with one pair of parallel sides.

**No mark** is awarded unless the shape has four sides.

**No mark** is awarded for a shape which has more than one pair of parallel sides.

[1]

4



[1]

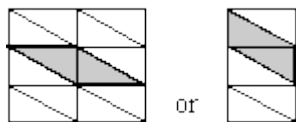
5

Uses the dots to draw a 4-sided shape with no right angles

[1]

6

(a) Indicates



1

(b) Indicates the correct shape not shaded in part (a).

**Throughout**, shading or drawing need not be accurate, as long as the pupil's intention is clear.

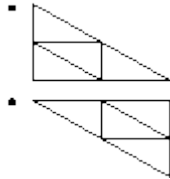
Accept correct shapes drawn on any grid.

Ignore the shape given in the example, or individual single triangles, shaded or drawn on any grid.

Ignore a correct shape repeated on any grid.

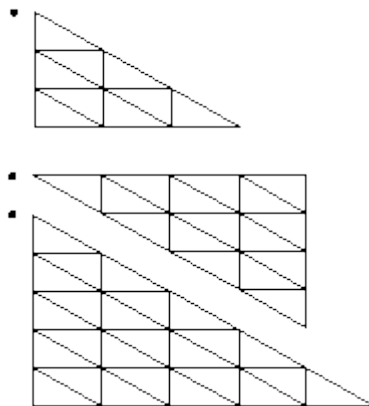
1

(c) Indicates 4 triangles which form a bigger triangle similar to those forming the grid, eg:



1

(d) Indicates 9 or more triangles which form a bigger triangle similar to those forming the grid, eg:



1

[4]