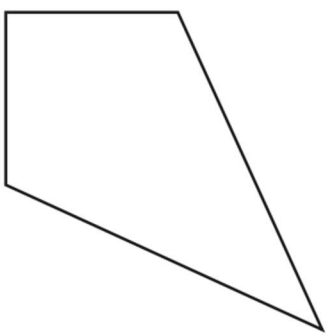
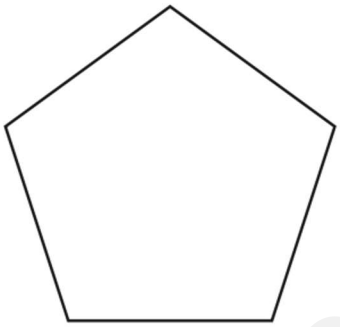
3 Draw **all** the lines of symmetry on each of these shapes.



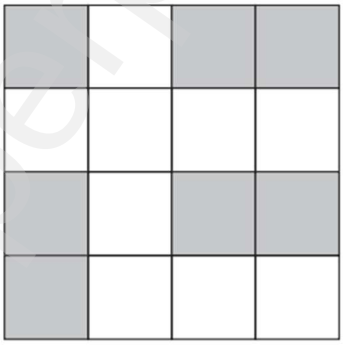


[2]

2 Write down the number of lines of symmetry of a kite.

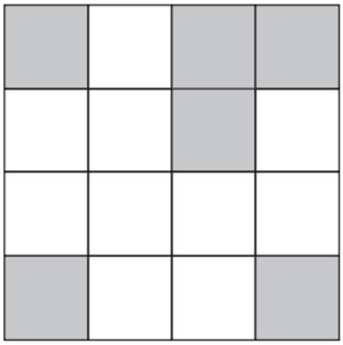
..... [1]

3 **(a)** Shade **one** square so that the shape has one line of symmetry.



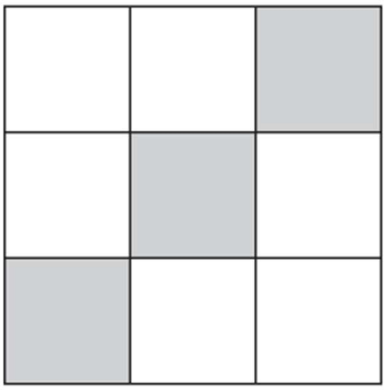
[1]

(b) Shade **two** squares so that the shape has rotational symmetry of order 2.



[1]

1



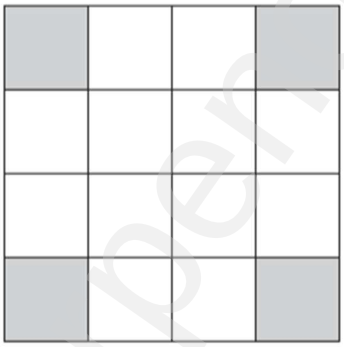
(a) Complete the statement.

The diagram has rotational symmetry of order ..... . [1]

(b) On the diagram, draw all the lines of symmetry.

[2]

1

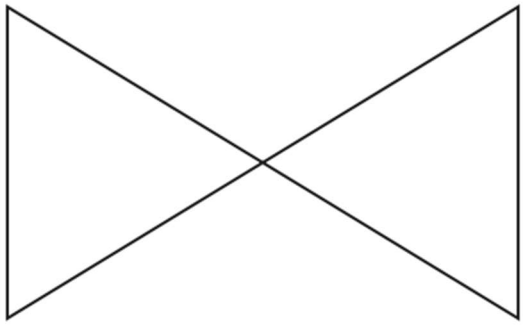


(a) Write down the order of rotational symmetry of this diagram.

..... [1]

(b) On the diagram, draw all the lines of symmetry. [2]

1

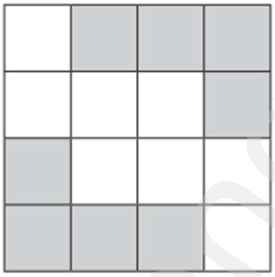


(a) Complete this statement.

The diagram has rotational symmetry of order ..... [1]

(b) On the diagram, draw all the lines of symmetry. [2]

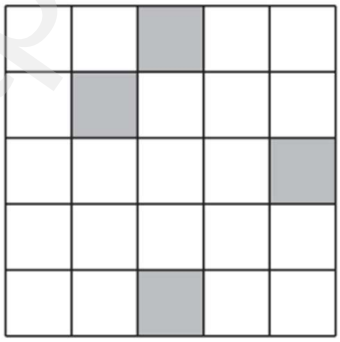
1



Write down the order of rotational symmetry of the diagram.

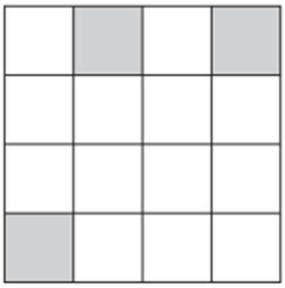
..... [1]

3



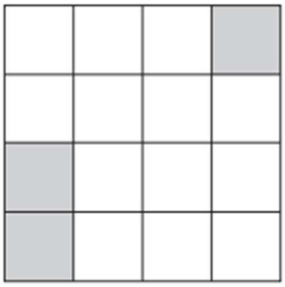
Shade **two** more small squares to make a pattern with two lines of symmetry. [1]

1 **(a)**



Shade **one** more small square so that the diagram has one line of symmetry. [1]

(b)



Shade **one** more small square so that the diagram has rotational symmetry of order 2. [1]

3 A quadrilateral has rotational symmetry of order 2 and no lines of symmetry.

Write down the mathematical name of this quadrilateral.

..... [1]

1 A quadrilateral has rotational symmetry of order two, two lines of symmetry and its angles are **not** right angles.

What is the special name of this quadrilateral?

..... [1]

3 A quadrilateral has one line of symmetry.
The diagonals of the quadrilateral cross at right angles.

Write down the mathematical name of the quadrilateral.

..... [1]

4 A quadrilateral has all sides equal and exactly two lines of symmetry.

Write down the mathematical name of this quadrilateral.

..... [1]

4 **(a)** Write down the mathematical name of the quadrilateral that has rotational symmetry of order 2 but no lines of symmetry.

..... [1]

(b) Write down the mathematical name of the quadrilateral that has exactly one line of symmetry.

..... [1]

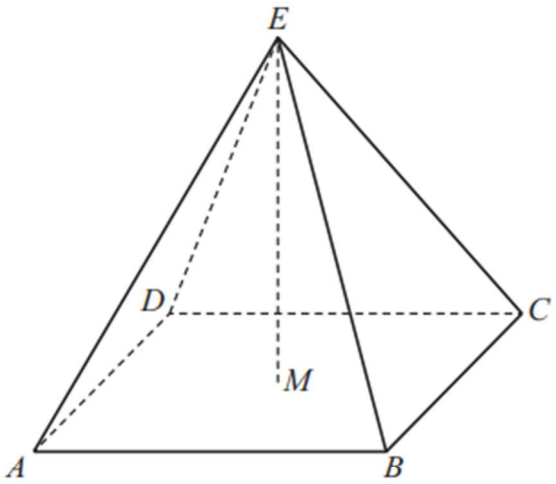
1 A quadrilateral has these properties

- the diagonals are the only lines of symmetry
- it has rotational symmetry of order 2.

Write down the mathematical name of this quadrilateral.

..... [1]

3



NOT TO SCALE

The diagram shows a pyramid $ABCDE$ with a square base.
M is the centre of the square base.
E is vertically above M.

(a) Write down the number of planes of symmetry of this pyramid.

..... [1]

(b) Using two of the letters from A, B, C, D, E and M, complete the statement about the pyramid.

The axis of rotational symmetry passes through the points ..... and ..... [1]