EXAM PAPERS PRACTICE

Symmetry

Question Paper

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

[1]

(b) Draw the lines of symmetry on the diagram. [1]

T R I G O N O M E T R Y

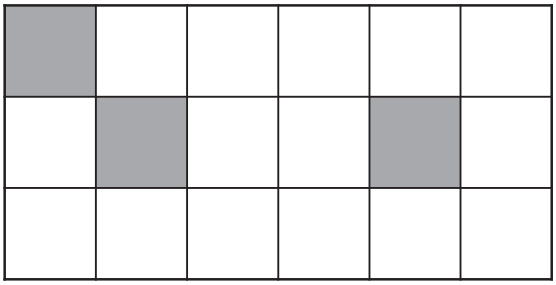
From the above word, write down the letters which have

(a) exactly two lines of symmetry, [1]

(b) rotational symmetry of order 2. [1]

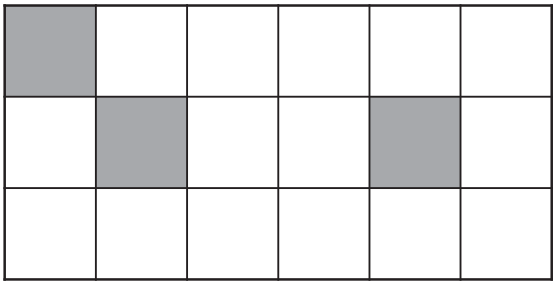
(a) Shade **one** square in each diagram so that there is

(i) one line of symmetry,



[1]

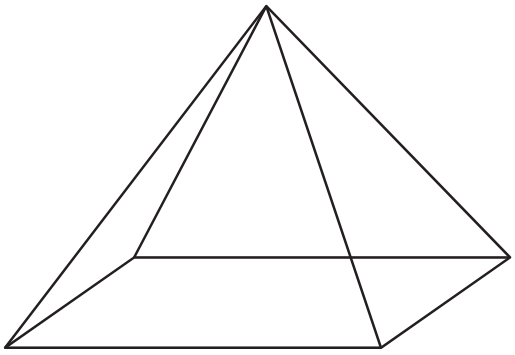
(ii) rotational symmetry of order 2.



[1]

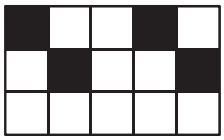
(b) The pyramid below has a rectangular base.
The vertex of the pyramid is vertically above the centre of the base.

Write down the number of **planes** of symmetry for the pyramid.



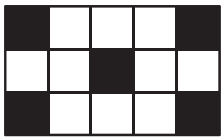
[1]

(a) Write down the number of lines of symmetry for the diagram below.



[1]

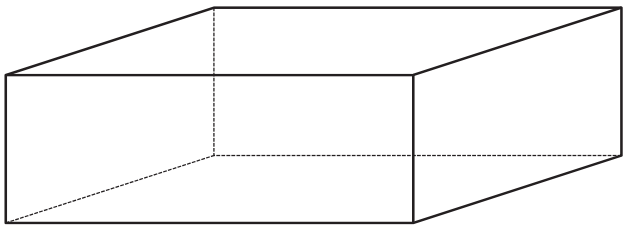
(b) Write down the order of rotational symmetry for the diagram below.



[1]

(c) The diagram shows a cuboid which has no square faces.

Draw one of the **planes** of symmetry of the cuboid on the diagram.

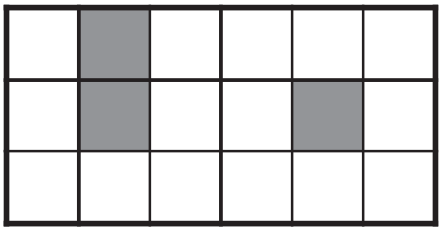


[1]

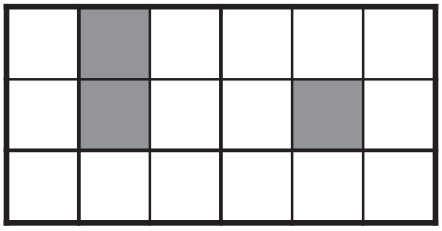
Question 5

(a) Shade one square in each diagram so that there is

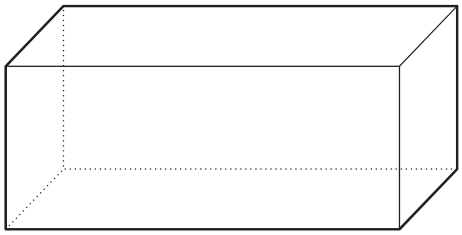
(i) one line of symmetry, [1]



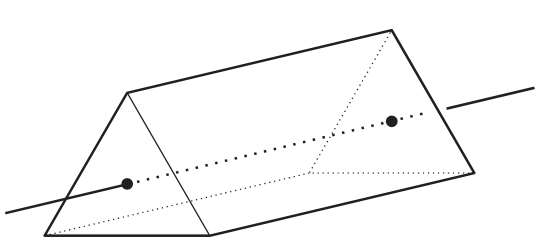
(ii) rotational symmetry of order 2. [1]



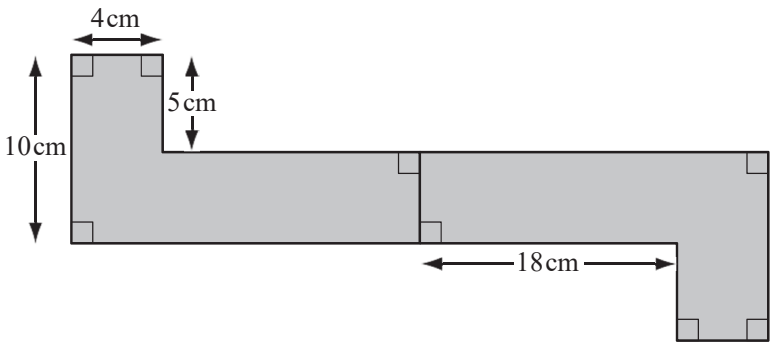
(b) On the diagram below, sketch one of the **planes** of symmetry of the cuboid. [1]



(c) Write down the order of rotational symmetry of the equilateral triangular prism about the axis shown. [1]



Question 6



NOT TO SCALE

The shaded shape has rotational symmetry of order 2.

Work out the shaded area. [3]

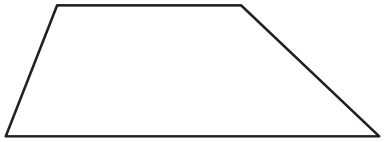
(a) Draw a quadrilateral which has rotational symmetry of order 2 and whose diagonals are equal in length.

[2]

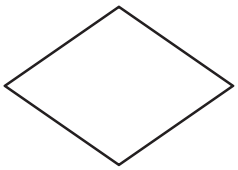
(b) Write down the special name of this quadrilateral. [1]

Question 8

Parallelogram



Trapezium



Rhombus

Write down which one of these shapes has

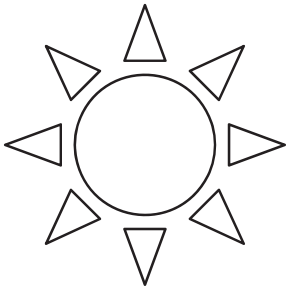
- rotational symmetry of order 2

and

- no line symmetry.

[1]

Question 9



Write down the order of rotational symmetry of this shape. [1]

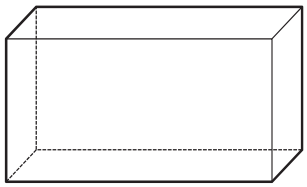
Question 10

EXAM PAPERS PRACTICE

(a) Add **one** line to the diagram so that it has two lines of symmetry. [1]

(b) Add **two** lines to the diagram so that it has rotational symmetry of order 2. [1]

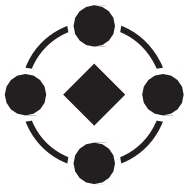
(a) The diagram shows a cuboid.



How many planes of symmetry does this cuboid have?

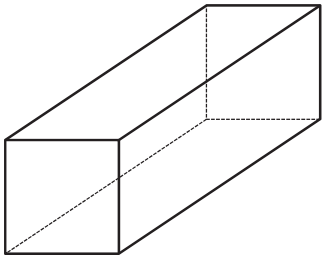
[1]

(b) Write down the order of rotational symmetry for the following diagram.



[1]

(a)

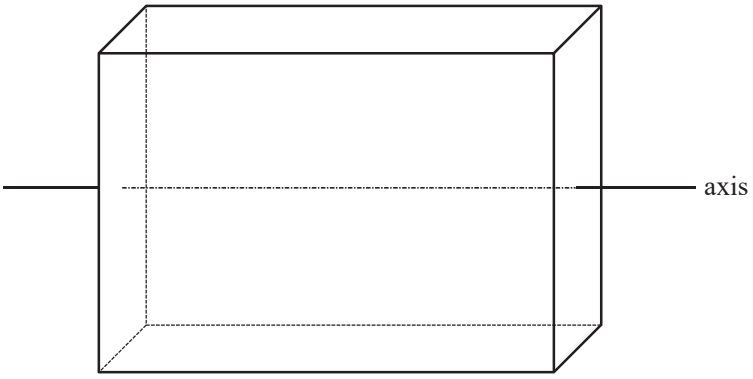


This cuboid has a **square** cross-section.

Write down the number of planes of symmetry.

[1]

(b)



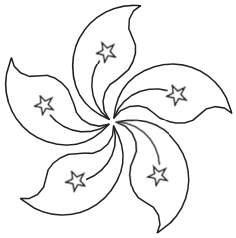
This cuboid has a **rectangular** cross-section.

The axis shown passes through the centre of two opposite faces.

Write down the order of rotational symmetry of the cuboid about this axis.

[1]

Question 13



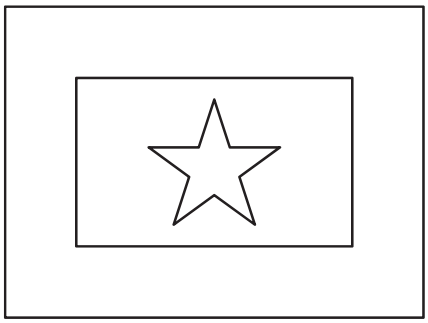
For the diagram, write down

(a) the order of rotational symmetry,

[1]

(b) the number of lines of symmetry.

[1]



For the **diagram**, write down

(a) the order of rotational symmetry,

[1]

(b) the number of lines of symmetry.

[1]

Question 15

For the diagram above write down

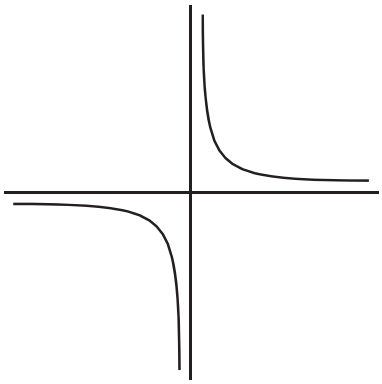
(a) the order of rotational symmetry,

[1]

(b) the number of lines of symmetry.

[1]

Question 16

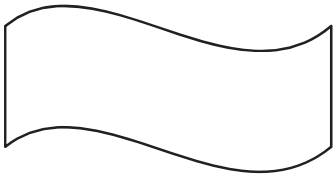


(a) Write down the order of rotational symmetry of the diagram.

[1]

(b) Draw all the lines of symmetry on the diagram. [1]

Question 17



For this diagram, write down

(a) the order of rotational symmetry, [1]

(b) the number of lines of symmetry. [1]

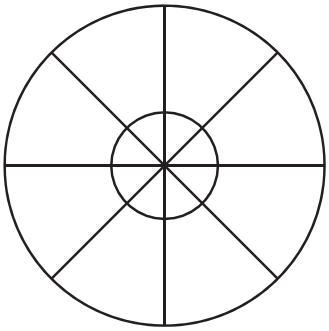
Question 18

For the diagram, write down

(a) the order of rotational symmetry, [1]

(b) the number of lines of symmetry. [1]

Question 19

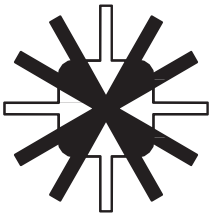


For the diagram above write down

(a) the order of rotational symmetry, [1]

(b) the number of lines of symmetry. [1]

Question 20



For the shape above, write down

(a) the number of lines of symmetry,

[1]

(b) the order of rotational symmetry.

[1]