

IGCSE · Cambridge (CIE) · Maths





Non-Calculator Questions

## **Geometry Toolkit**

Rotational Symmetry / Lines of Symmetry / 2D Shapes / 3D Shapes / Planes of Symmetry / Converting between Units / Squared & Cubic Units

| Total Marks          | /14 |
|----------------------|-----|
| Hard (3 questions)   | /3  |
| Medium (4 questions) | /4  |
| Easy (4 questions)   | /7  |

Scan here to return to the course

or visit savemyexams.com



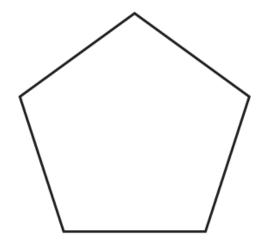


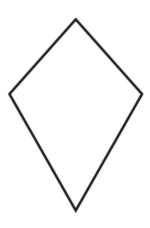
## **Easy Questions**

| 1 (a) | Complete each statement.   |
|-------|--|
|       | A quadrilateral with only one pair of parallel sides is called a |
|       | (1 mark)   |
| (b)   | An angle greater than 90° but less than 180° is called           |
|       | (1 mark)   |



2 (a)





The diagram shows a regular pentagon and a kite. Complete the following statements.

The regular pentagon has ...... lines of symmetry.

(1 mark)

**(b)** The kite has rotational symmetry of order ......

(1 mark)

3 Change 1 m<sup>3</sup> to cm<sup>3</sup>.

..... cm<sup>3</sup>

(1 mark)

4 Change 32.4 m<sup>3</sup> into cm<sup>3</sup>.

..... cm<sup>3</sup>

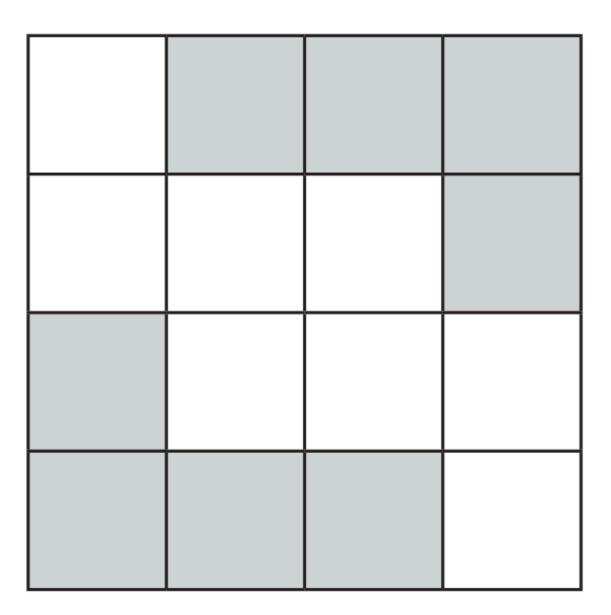
(2 marks)

## **Medium Questions**

**1** Change 457000 cm<sup>2</sup> into m<sup>2</sup>.

(1 mark)

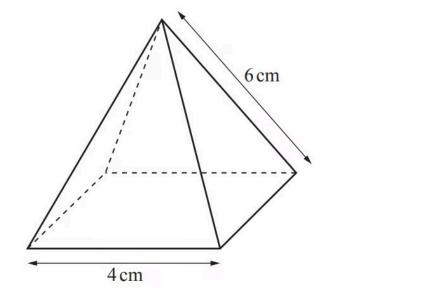
2



Write down the order of rotational symmetry of the diagram.

(1 mark)

3



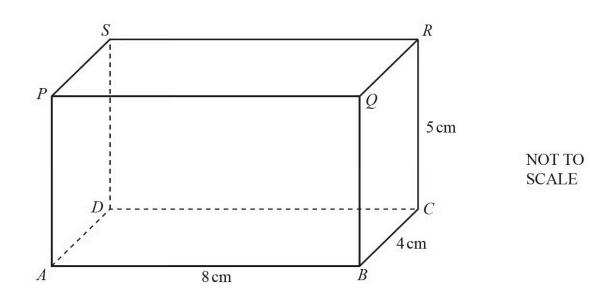
NOT TO SCALE

The diagram shows a pyramid with a square base. The triangular faces are congruent isosceles triangles.

Write down the number of planes of symmetry of this pyramid.

(1 mark)

4



The diagram shows a cuboid.

AB = 8 cm, BC = 4 cm and CR = 5 cm.

Write down the number of planes of symmetry of this cuboid.

(1 mark)



## **Hard Questions**

1 Chai says that  $8 \text{ cm}^2$  is the same as  $80 \text{ mm}^2$ .

Explain why Chai is wrong.

(1 mark)

**2** The cross section of a prism has n sides.

Which expression describes the number of edges of the prism?

- **A.** 2*n*
- **B.** 3*n*
- C. n + 2
- **D.** 2n + 3

(1 mark)

- **3** Which volume is the same as  $15 \text{ cm}^3$ ?
  - **A.** 15 000 mm<sup>3</sup>
  - **B.**  $1.5 \text{ mm}^3$
  - $\mathbf{C.}\ 0.0015\ \mathrm{mm}^{3}$
  - **D.** 150 mm<sup>3</sup>

(1 mark)