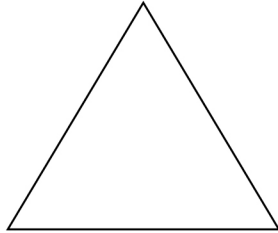


1

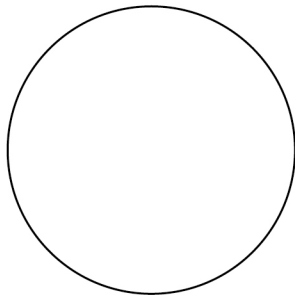
Circle the letter of the shape that has rotational symmetry of order 2

[1 mark]

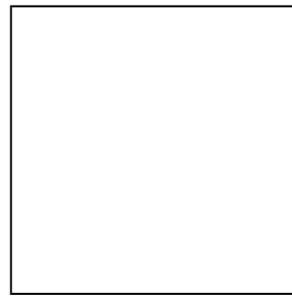
P



R

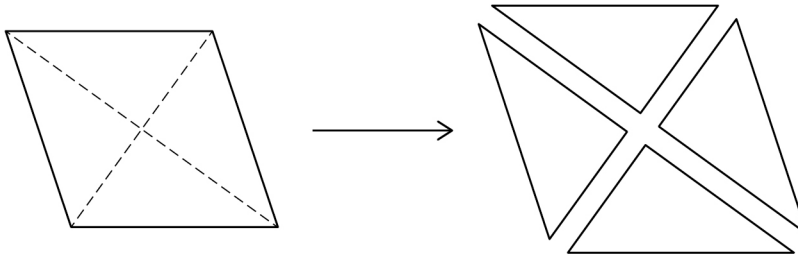


S



2

A rhombus is cut along the diagonals to make four triangles.



Not drawn  
accurately

Which **three** statements are correct for any rhombus?

Tick **three** boxes.

[2 marks]

☒

All four triangles are right-angled

☐

All four triangles are isosceles

2

☒

All four triangles are congruent

☒

Area of rhombus =  $4 \times$  area of one triangle

☐

Perimeter of rhombus =  $4 \times$  perimeter of one triangle

- 3 Which shape **can** have sides with lengths that are all different?  
Circle your answer.

[1 mark]

trapezium



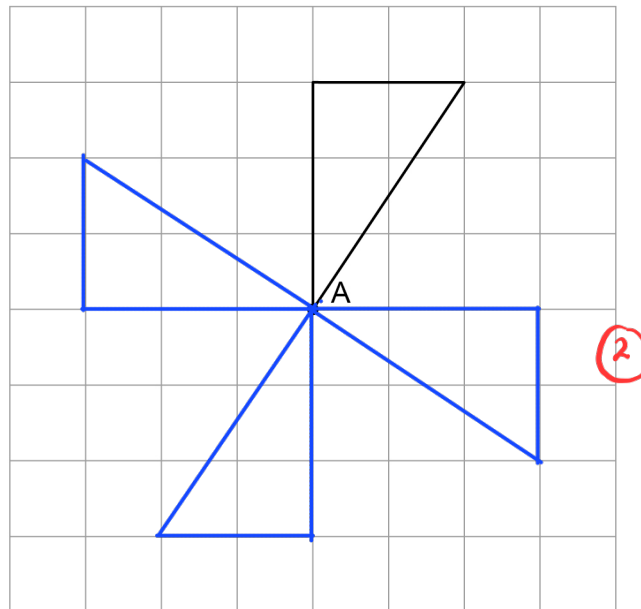
kite

parallelogram

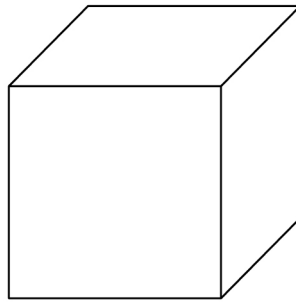
rhombus

4

Complete the diagram so that it has  
rotational symmetry of order 4  
centre of rotation at point A.

**[2 marks]**

5 Which of these is a correct statement about a cube?



Tick **one** box.

[1 mark]

☒

It has 12 edges.

☐

It has 12 faces.

☐

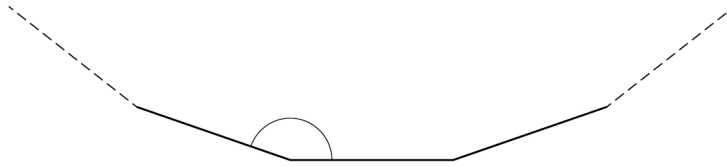
It has 12 planes.

☐

It has 12 vertices.

6

Part of a regular polygon with 15 sides is shown.



Not drawn  
accurately

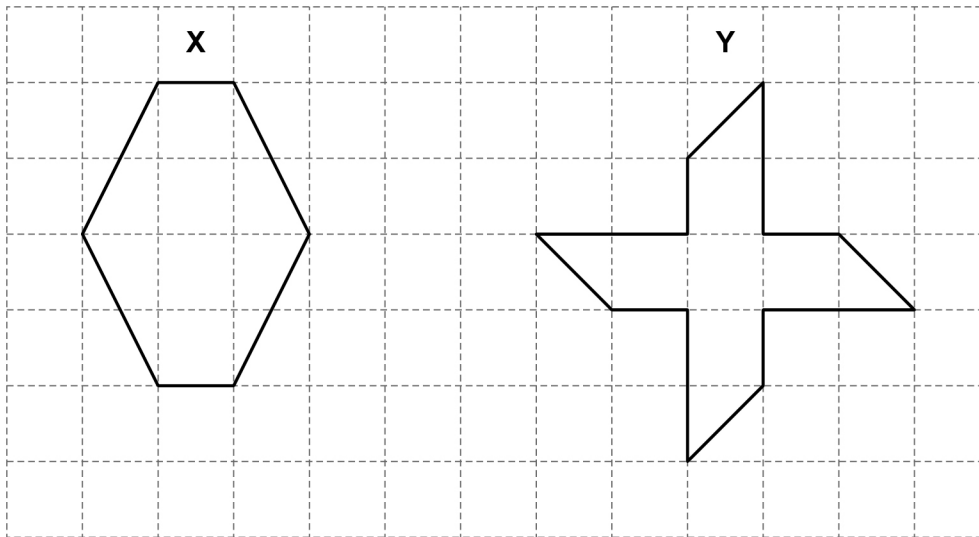
Work out the size of an **interior** angle.

[2 marks]

$$\frac{(15 - 2) \times 180}{15} = \frac{2340}{15} = 156$$

Answer 156 degrees

7 Shapes X and Y are shown on a centimetre grid.



7 (a) Circle the name of shape X.

[1 mark]

pentagon

hexagon

octagon

decagon

7 (b) Give a reason why shape Y is **not** a regular polygon.

[1 mark]

Sides are not equal

7 (c) Complete these statements.

[2 marks]

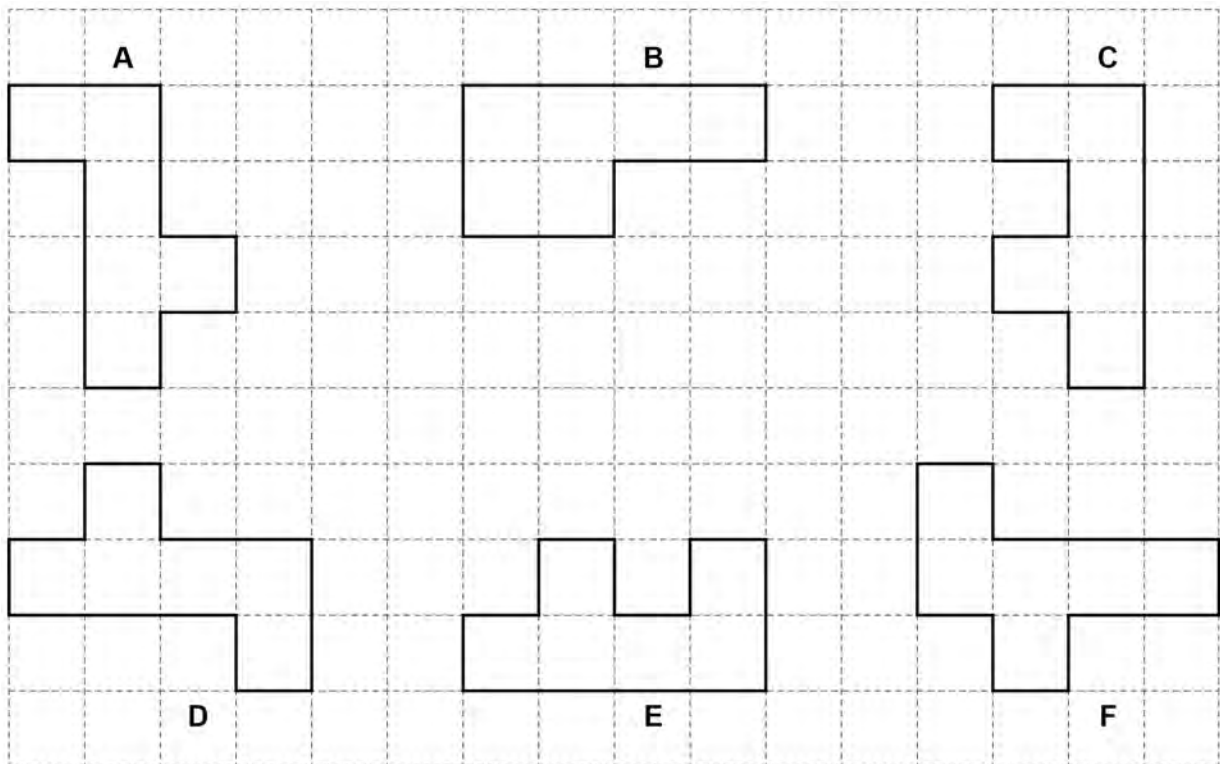
The number of lines of symmetry of shape X is 2

The order of rotational symmetry of shape Y is 4

8

Here are some shapes.

Each shape has an area of six square centimetres.



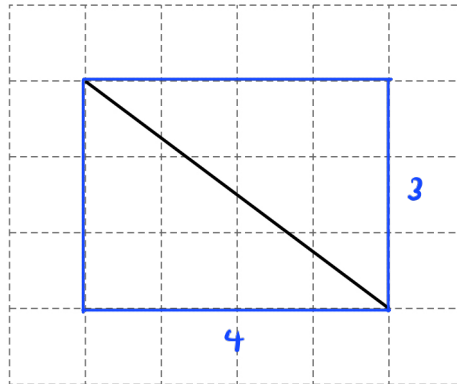


8 (a) Which **two** shapes fit together to make a rectangle?

[1 mark]

Answer     C     and     E     ①

- 9 (a) A diagonal of a rectangle is drawn on a centimetre grid. The sides of the rectangle are on the grid lines.



Work out the area of the rectangle.

[2 marks]

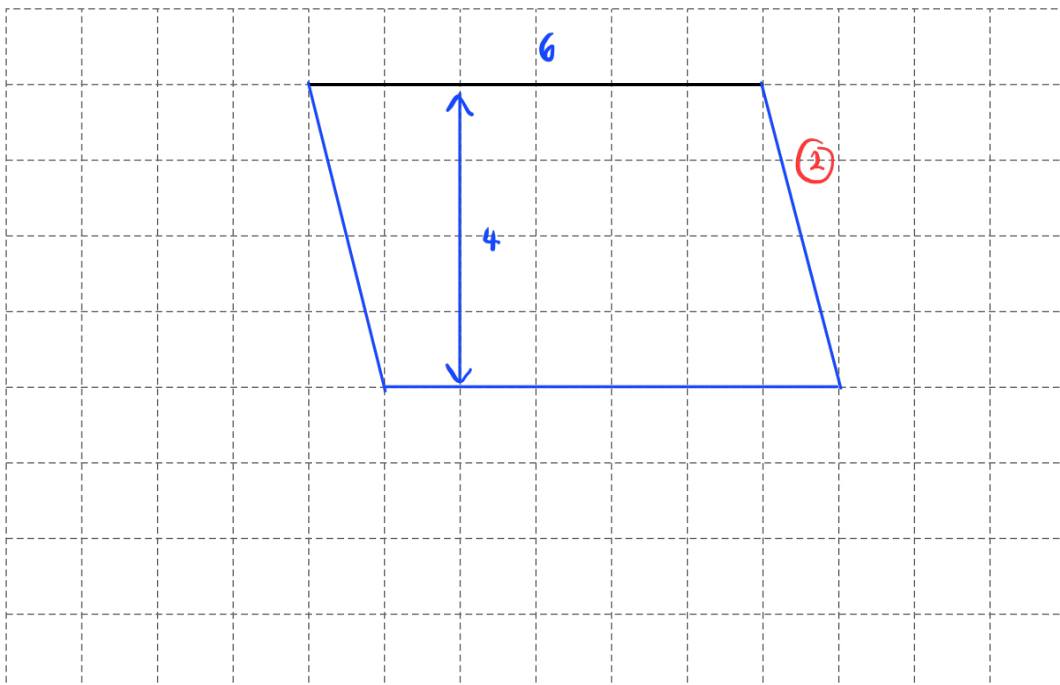
$$4 \times 3 = 12$$

Answer 12 cm<sup>2</sup>

- 9 (b) One side of a parallelogram is drawn on this centimetre grid. The parallelogram does **not** have any right angles.

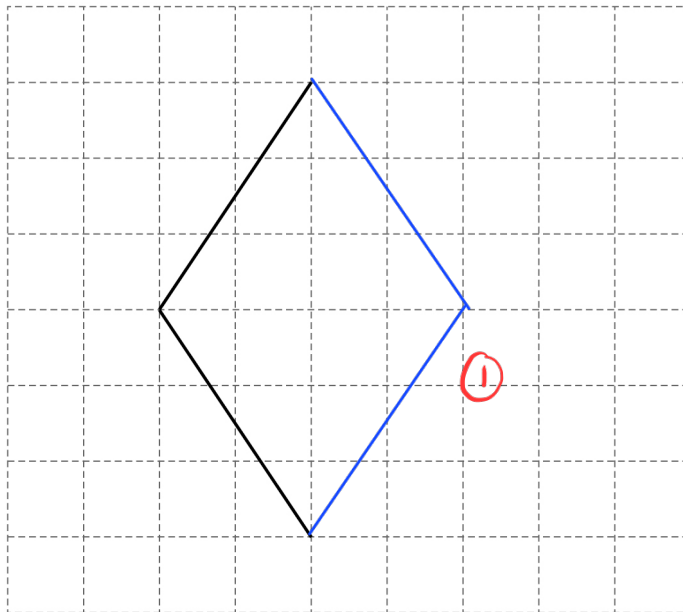
Complete the parallelogram so that it has area 24 cm<sup>2</sup>

[2 marks]



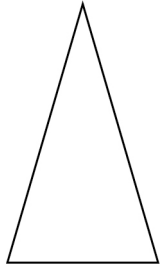
- 9 (c)** Two sides of a rhombus are drawn on this grid.  
Complete the rhombus.

**[1 mark]**



- 10 Circle the letter of the shape that has **exactly one** line of symmetry. [1 mark]

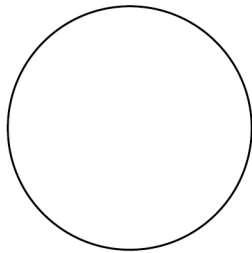
P I



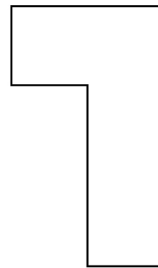
Q



R

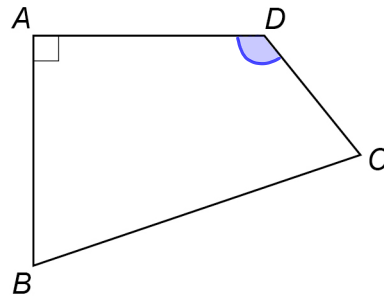


S



11

In the quadrilateral, which angle is **obtuse**?  $90^\circ < x < 180^\circ$



Circle your answer.

[1 mark]

ADC

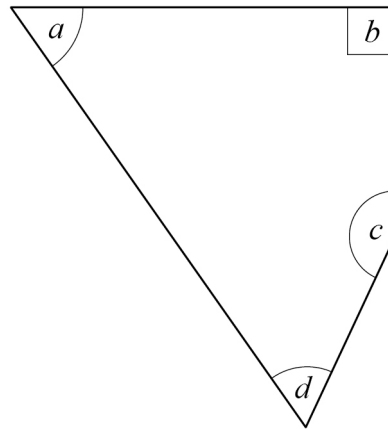
1

BAD

CBA

DCB

12 Here is a quadrilateral.



12 (a) Write down the letter of the obtuse angle. ↪  $90^\circ < \theta < 180^\circ$

[1 mark]

Answer     c     ✓ ①

12 (b) Write down the letter of an acute angle.

[1 mark]

Answer     d     ✓ ①

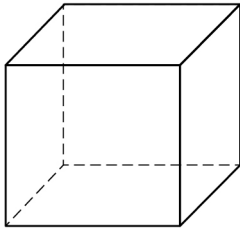
12 (c) How many lines of symmetry does the shape have?

[1 mark]

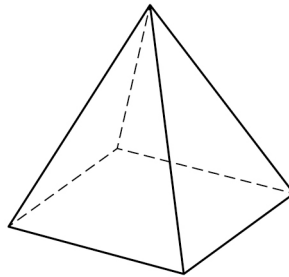
Answer     0     ✓ ①

13 Here are three solids.

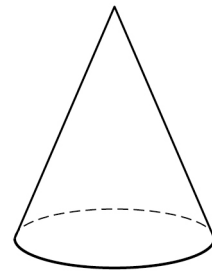
**Cube**



**Square-based pyramid**



**Cone**



13 (a) How many **faces** does the cube have?

[1 mark]

Answer 6 ✓ ①

13 (b) How many **edges** does the square-based pyramid have?

[1 mark]

Answer 8 ✓ ①

13 (c) How many **vertices** does the cone have?

[1 mark]

Answer 1 ✓ ①