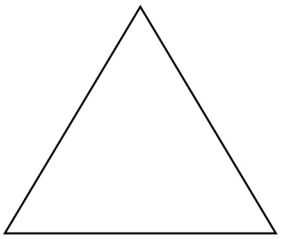
1 Circle the letter of the shape that has rotational symmetry of order 2

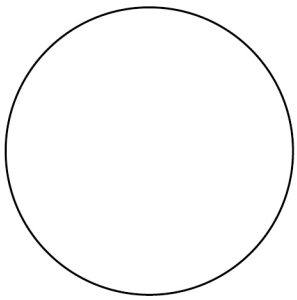
[1 mark]

P

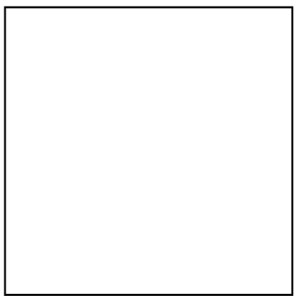


Q

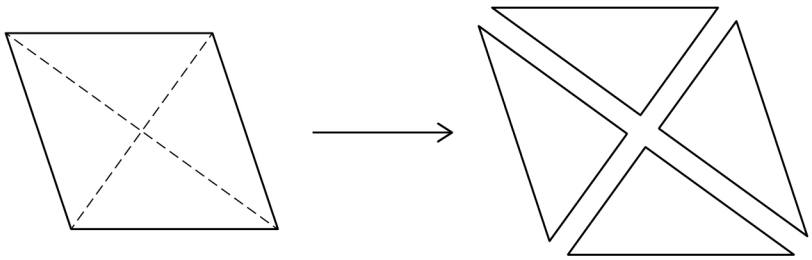
R



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
- ☐ All four triangles are congruent
- ☐ Area of rhombus = 4 × area of one triangle
- ☐ Perimeter of rhombus = 4 × perimeter of one triangle

3 Which shape **can** have sides with lengths that are all different?

Circle your answer.

[1 mark]

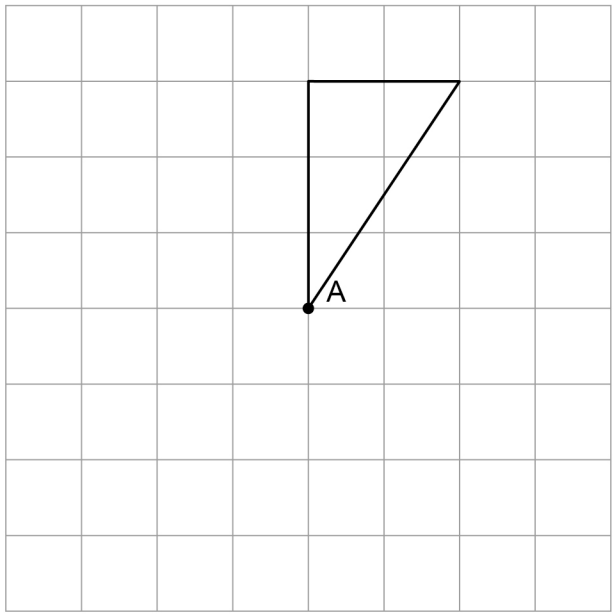
trapezium kite parallelogram rhombus

4 Complete the diagram so that it has

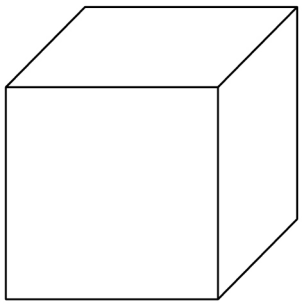
rotational symmetry of order 4

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.

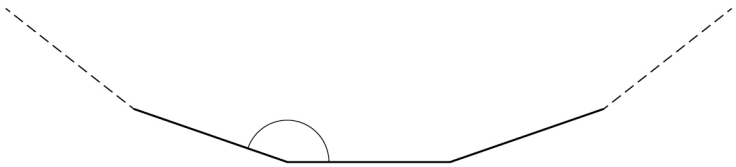
☐ It has 12 faces.

☐ It has 12 planes.

☐ It has 12 vertices.

6 Part of a regular polygon with 15 sides is shown.

Not drawn accurately

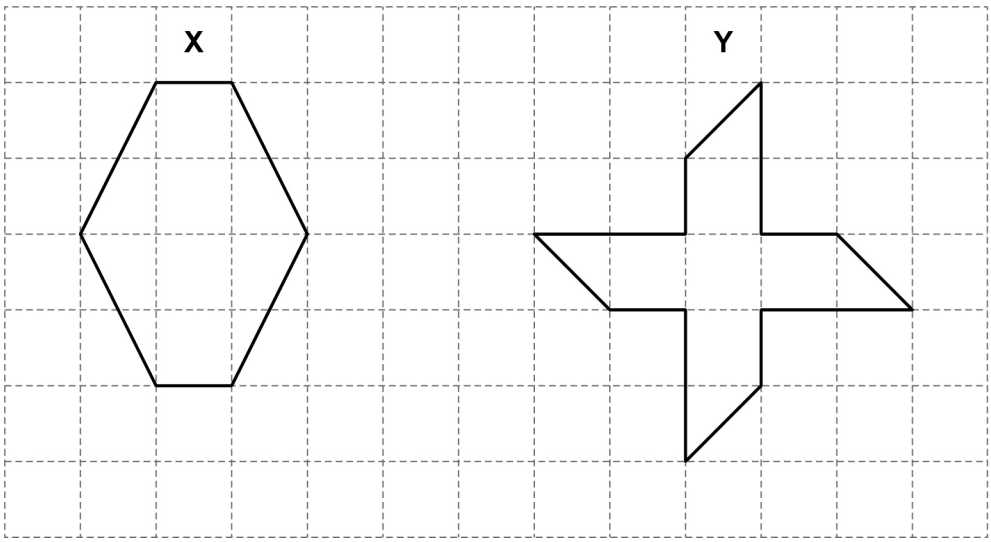


Work out the size of an **interior** angle.

[2 marks]

Answer _____ 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]

7 (c) Complete these statements.

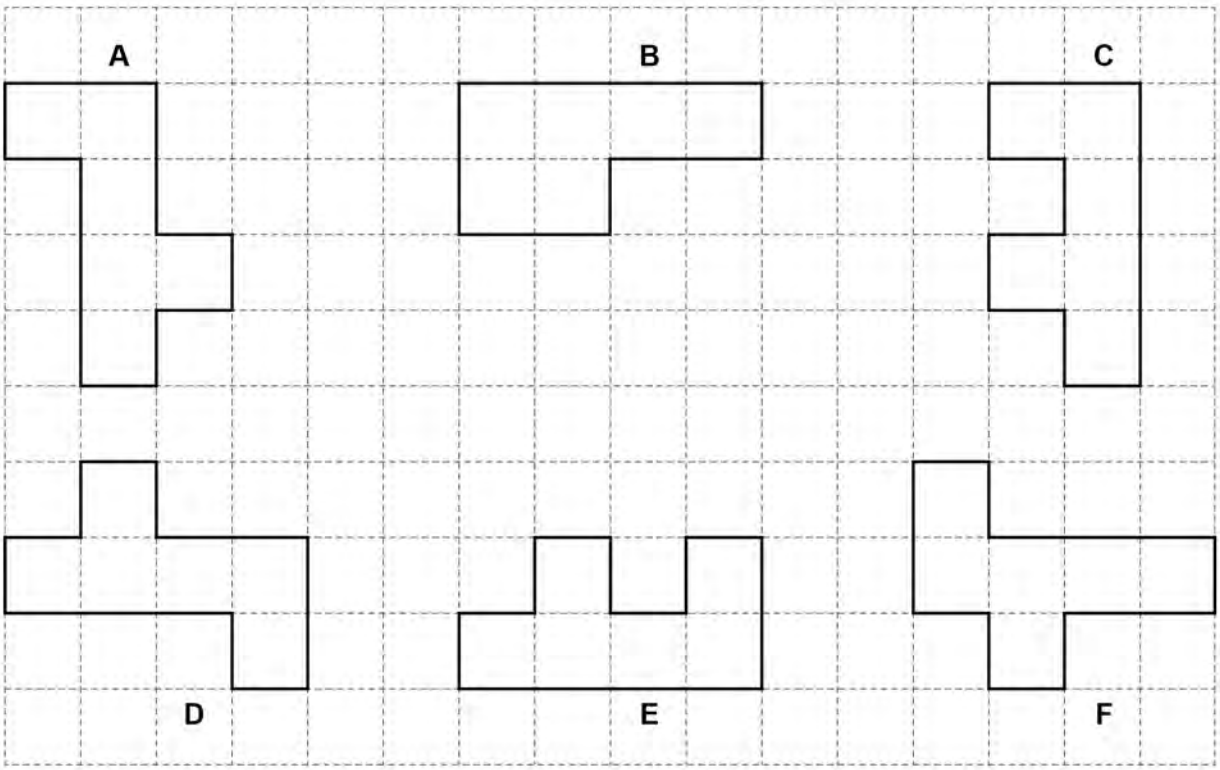
[2 marks]

The number of lines of symmetry of shape **X** is _____

The order of rotational symmetry of shape **Y** is _____

8 Here are some shapes.

Each shape has an area of six square centimetres.

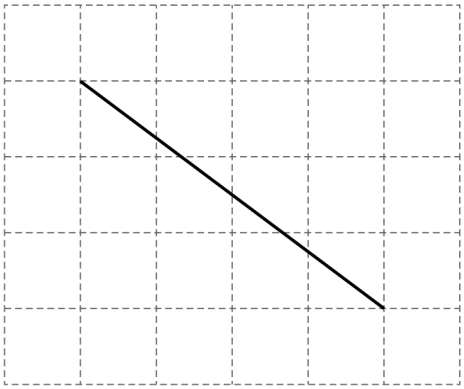


8 (a) Which **two** shapes fit together to make a rectangle?

[1 mark]

Answer _____ and _____

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.

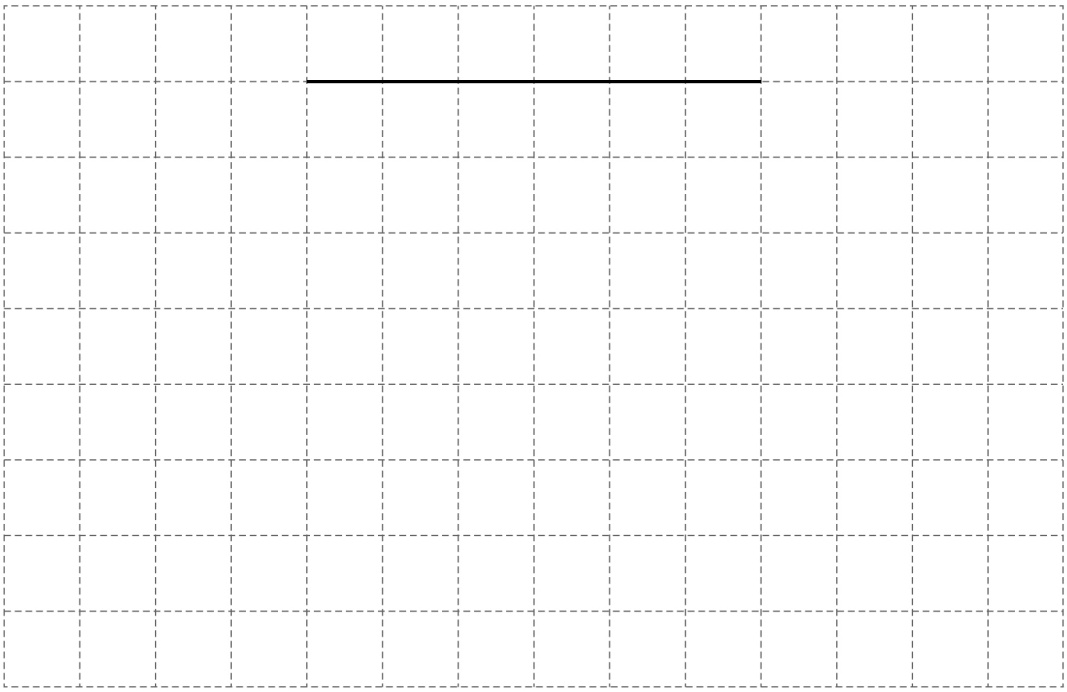
[2 marks]

Answer _____ cm^2

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^2

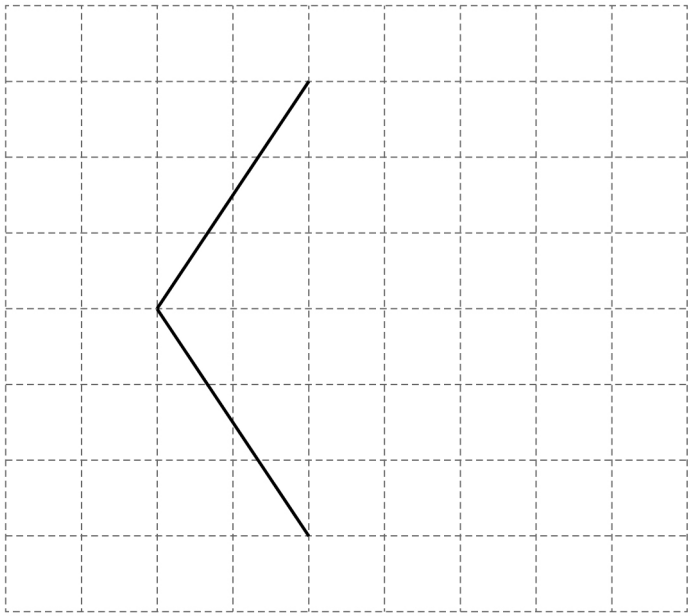
[2 marks]



9 (c) Two sides of a rhombus are drawn on this grid.

Complete the rhombus.

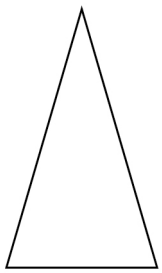
[1 mark]



10 Circle the letter of the shape that has **exactly one** line of symmetry.

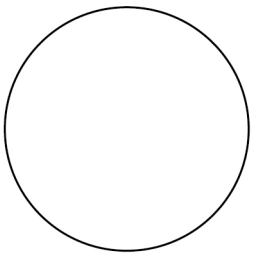
[1 mark]

P

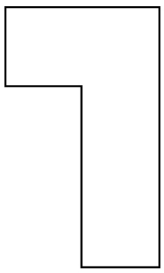


Q

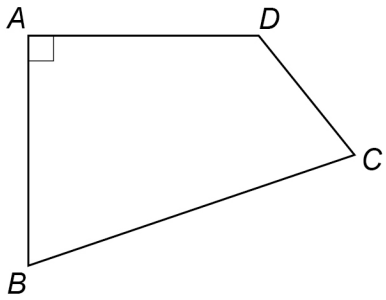
R



S



11 In the quadrilateral, which angle is **obtuse**?

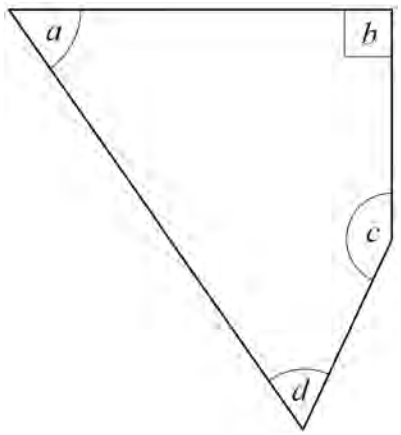


Circle your answer.

[1 mark]

ADC *BAD* *CBA* *DCB*

12 Here is a quadrilateral.



12 (a) Write down the letter of the obtuse angle.

[1 mark]

Answer _____

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

[1 mark]

Answer _____

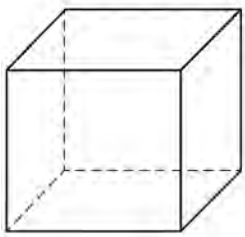
12 (c) How many lines of symmetry does the shape have?

[1 mark]

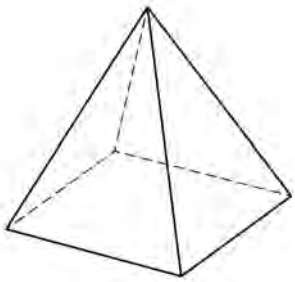
Answer _____

13 Here are three solids.

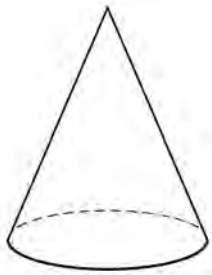
Cube



Square-based pyramid



Cone



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

[1 mark]

Answer _____

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

[1 mark]

Answer _____

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

[1 mark]

Answer _____