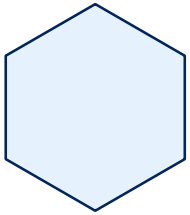
GCSE FOUNDATION · REVISION MAT 1

Properties of 2D shapes

1 A quadrilateral has four equal sides and no right angles.

What type of quadrilateral is it?

2 Here is a regular hexagon.

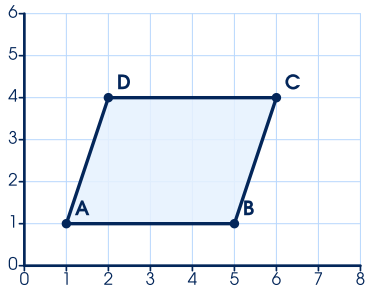


(a) How many lines of symmetry does it have?

(b) What is its order of rotational symmetry?

3 Is a square a rectangle?
Explain your answer.

4 ABCD is drawn on the grid.

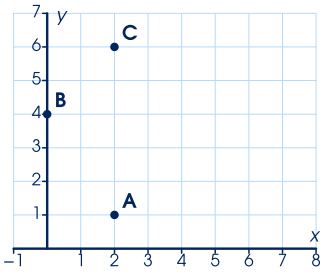


Show that ABCD is a parallelogram.

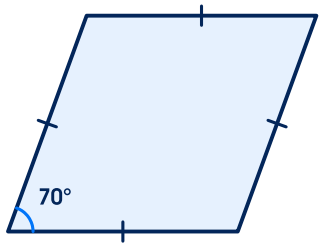
5 A, B and C are three vertices of a kite ABCD.
A (2, 1), B (0, 4), C (2, 6).

The line AC is a line of symmetry.

Find the coordinates of D.



6 This rhombus has sides of 6 cm and one angle of 70°.



(a) Work out the sizes of the other three angles.

(b) Work out the perimeter.

ANSWERS · REVISION MAT 1

Properties of 2D shapes

1 **Rhombus**

2 (a) **6**

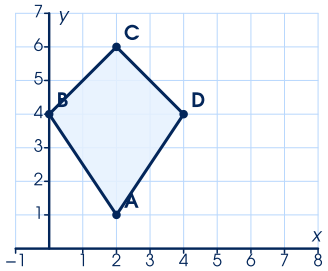
(b) **6**

3 Yes: a square has four right angles and opposite sides equal and parallel, so it fits the definition of a rectangle.

4 AB: $\begin{pmatrix}4\\0\end{pmatrix}$ and DC: $\begin{pmatrix}4\\0\end{pmatrix}$

AB and DC are equal and parallel (and so are AD and BC), so ABCD is a **parallelogram** ✓

5



D = **(4, 4)**

6 (a) Opposite angles are equal; adjacent angles add to 180°.

110°, 70° and 110°

(b) 4 × 6 = **24 cm**