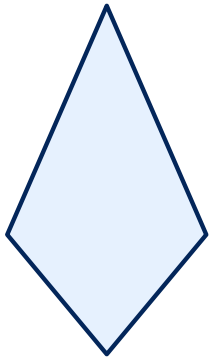
GCSE FOUNDATION · REVISION MAT 5

Properties of 2D shapes

1 A quadrilateral has four right angles and sides not all equal.

What type of quadrilateral is it?

2 Here is a kite.

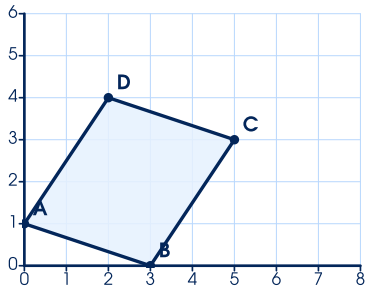


(a) How many lines of symmetry does it have?

(b) What is its order of rotational symmetry?

3 Is a square a rhombus?
Explain your answer.

4 ABCD is drawn on the grid.

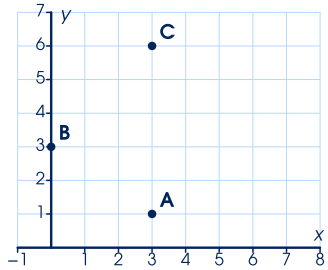


Show that ABCD is a parallelogram.

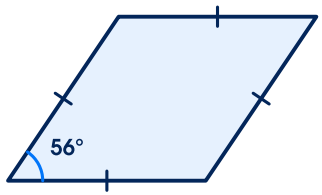
5 A, B and C are three vertices of a kite ABCD.
A (3, 1), B (0, 3), C (3, 6).

The line AC is a line of symmetry.

Find the coordinates of D.



6 This rhombus has sides of 8 cm and one angle of 56°.



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

(b) Work out the perimeter.

ANSWERS · REVISION MAT 5

Properties of 2D shapes

1 **Rectangle**

2 (a) **1**

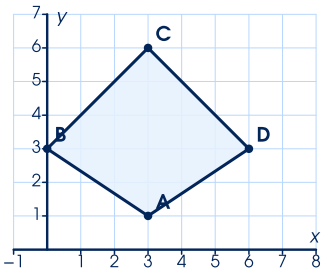
(b) **1**

3 Yes: a square has four equal sides, so it is a special rhombus (with right angles).

4 AB: $\begin{pmatrix} 3 \\ -1 \end{pmatrix}$ and DC: $\begin{pmatrix} 3 \\ -1 \end{pmatrix}$

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

5



D = **(6, 3)**

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

124°, 56° and 124°

(b) 4 × 8 = **32 cm**