GCSE HIGHER · REVISION MAT 2

Properties of quadrilaterals

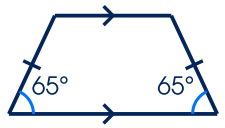
1 Name two quadrilaterals whose diagonals are always equal.

2 Write down the order of rotational symmetry of a parallelogram.

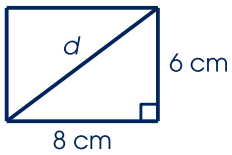
3 Explain why the diagonals of a kite cross at right angles.

4 An isosceles trapezium has two angles of 65°.

Find its other two angles.

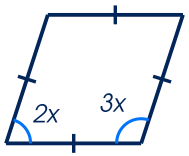


5 Show that a 6 cm by 8 cm rectangle has diagonals of 10 cm.



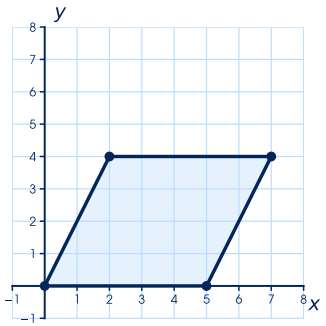
6 Two adjacent angles of a rhombus are $2x$ and $3x$.

Find the angles of the rhombus.



7 Explain why the co-interior angles of a trapezium add up to 180°.

8 A(0, 0), B(5, 0), C(7, 4), D(2, 4).



Show that ABCD is a parallelogram and find its area.

ANSWERS · REVISION MAT 2

Properties of quadrilaterals

1 **Rectangle and square (also isosceles trapezium)**

2 **2**

3 **The line of symmetry is one diagonal; the other diagonal is reflected onto itself, so it is perpendicular.**

4 Co-interior: 180 – 65

115° and 115°

5 $\sqrt{36 + 64}$

= 10 cm

6 $5x = 180 \Rightarrow x = 36$

72°, 108°, 72°, 108°

7 **They lie between a pair of parallel sides.**

8 AB and DC are both 5 units long and horizontal

Parallelogram; area 5 × 4 = 20 units²

Mr&Mrs MATHS