Investigating diagonals

● Classify quadrilaterals

1 Copy each quadrilateral on to 1 cm squared paper.

2 Draw in the diagonals.

quadrilateral names:
square, rectangle, rhombus,
trapezium, parallelogram, kite

You need:
- ● 1 cm squared paper
- ● red pencil

3 Below each shape write its name.

4 Draw in red the diagonals which intersect at right angles.
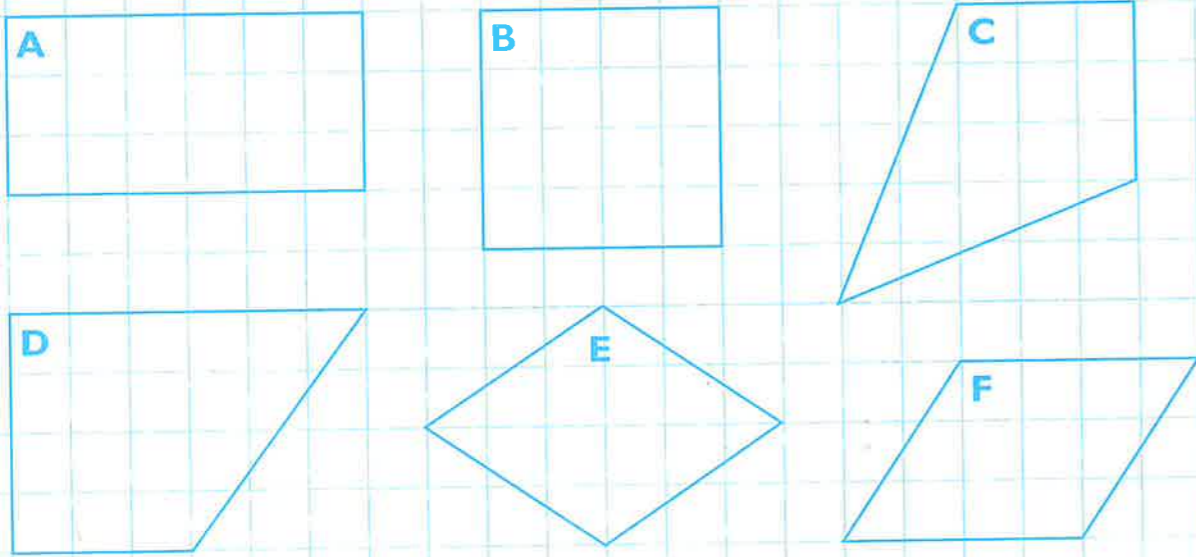
1 Copy these quadrilaterals on to 1 cm squared paper.

2 Draw in the diagonals and cut out each shape.

You need:
- ● 1 cm squared paper
- ● ruler ● scissors
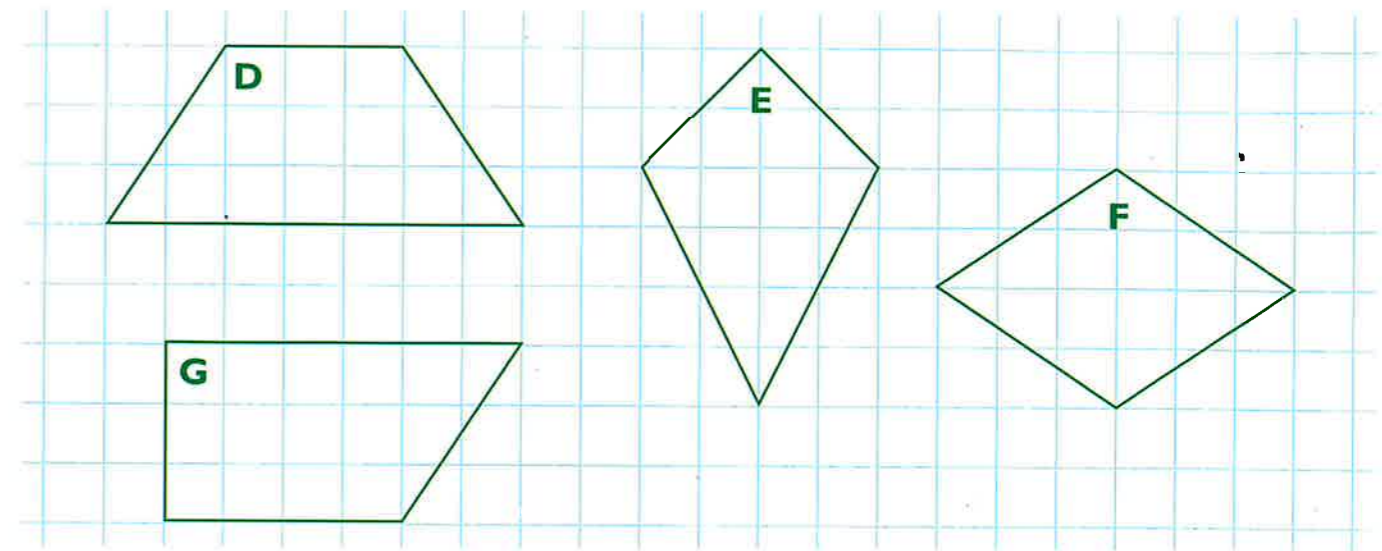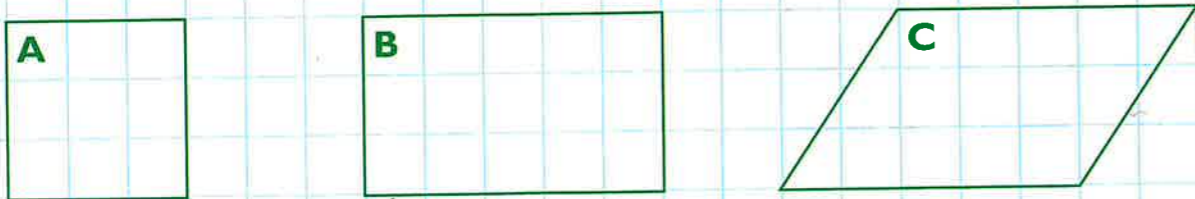
3 Copy and complete. Mark ✓ for *yes* and ✗ for *no*.
Find the answers by folding and measuring.

Property	Quadrilateral						
	A	B	C	D	E	F	G
4 sides equal	✓	✗	✗				
4 angles equal	✓						
diagonals are same length							
diagonals cut each other in half							
diagonals intersect at right angles							
a diagonal is an axis of symmetry							

Diagonals of rectangles and parallelograms.

1 Investigate this statement.
The diagonals of any rectangle are equal and bisect each other.

You need:
- ● 1 cm square dot paper
- ● ruler

2 Draw about 6 different parallelograms on 1 cm square dot paper.
Draw in the diagonals.
For each parallelogram, measure the diagonals from the vertices to the intersection.
Write what you notice.

3 Compare your results for questions **1** and **2**.
In what ways are the diagonals of rectangles and parallelograms similar? Different?