

Check out

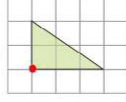
You should now be able to ...

✓ Recognise reflection and rotational symmetry of 2D shapes.	5	1
✓ Reflect shapes in mirror lines.	5	2
✓ Use vectors to translate shapes in any direction.	5	3
✓ Rotate shapes from a centre of rotation.	5	4
✓ Enlarge shapes using whole number and fractional scale factors.	5	5
✓ Enlarge shapes from a centre of enlargement.	6	6
✓ Use and draw scale drawings.	6	7

Test it

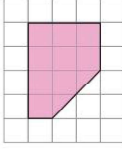
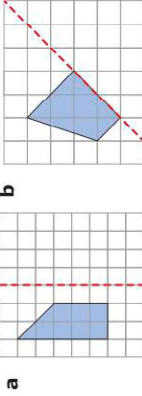
Questions

- Describe
 - the reflective symmetry
 - the rotational symmetry of this shape.



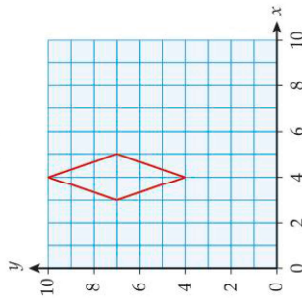
- Copy the quadrilaterals on squared paper and reflect the shapes in the mirror lines.
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- Copy the shape on squared paper then enlarge it by scale factor 3.
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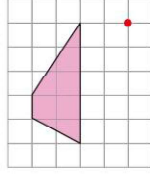


- What is the scale factor that would reduce the enlarged shape to the original?

- Copy the diagram and translate by the vector $\begin{pmatrix} 3 \\ -4 \end{pmatrix}$.



- Copy the trapezium on squared paper then enlarge by scale factor 2 using the dot as the centre of enlargement.



- A rectangular room is 5 m by 3 m. Draw a scale diagram of the room using the scale 2 cm : 1 m.

What next?

0 - 3	Your knowledge of this topic is still developing. To improve look at Formative test: 3A-9; MyMaths: 1099, 1103, 1113, 1114, 1115, 1116, 1117 and 1127
4 - 6	You are gaining a secure knowledge of this topic. To improve look at InvisiPen: 361, 362, 363, 366 and 372
7	You have mastered this topic. Well done, you are ready to progress!

Score



Language Meaning Example

Clockwise/ Anticlockwise	These are directions you can turn. It is the same/opposite direction to the hands on a clock.	clockwise anticlockwise
Line of symmetry	A line which divides a shape into two halves which are the mirror image of each other.	
Mirror line	A line in which you reflect a shape.	
Order of rotational symmetry	The number of times a shape looks exactly the same as itself during a complete turn.	A rectangle has rotational symmetry order 2.
Scale factor	Tells you by how many times to change each side of the shape.	A scale factor 2 tells you to draw each side twice as long.
Vector	A vector tells you how far to move a shape.	$\begin{pmatrix} 4 \\ -5 \end{pmatrix}$ move shape 4 units right $\begin{pmatrix} -5 \end{pmatrix}$ move shape 5 units down