

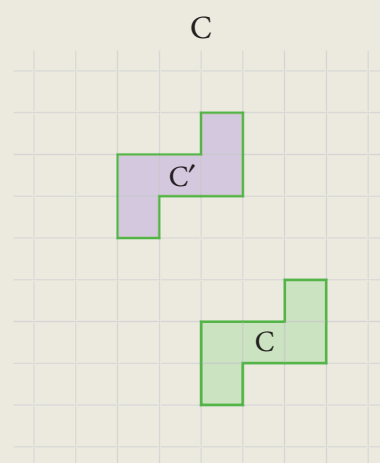
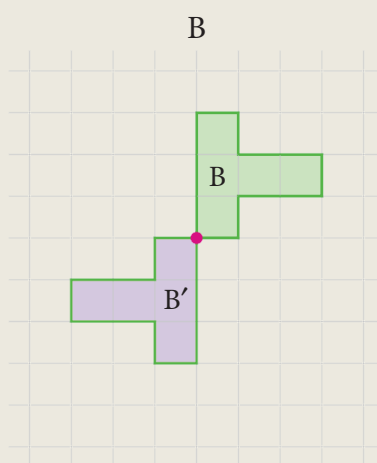
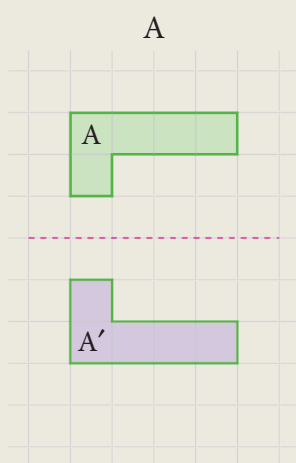
Viewing transformations

→ focus

To review the different types of transformations

show your understanding

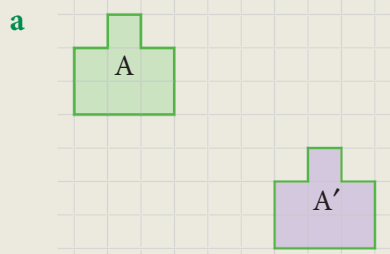
- Shapes can be transformed to other positions without changing size or shape. The shape in the new position is an **image** of the original shape. List the different transformations that can take place without changing the shape or size of the original object.
- Consider the three pairs of shapes shown below. *Note:* if the original shape is labelled as M, then the image is labelled as M'.



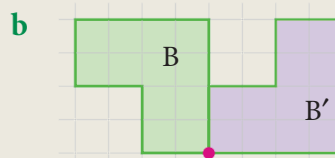
- Which of the shapes represents a translation of the original shape? Describe the translation that has taken place.
- Which of the shapes represents a rotation of the original shape? Describe the rotation that has taken place.
- Which of the shapes represents a reflection of the original shape? Describe the reflection that has taken place.

now try these

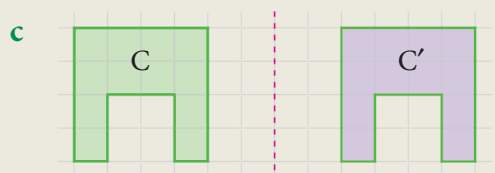
- 1 Copy and complete the sentences describing the transformations shown in each of the figures.



The shape has been translated _____ units
right/left and _____ units up/down.

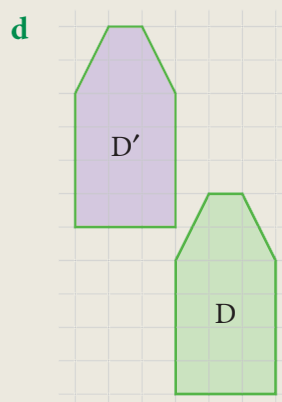
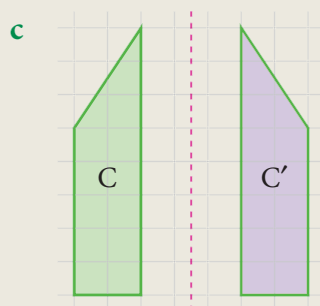
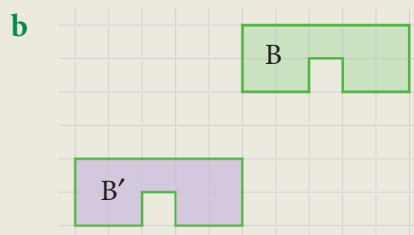
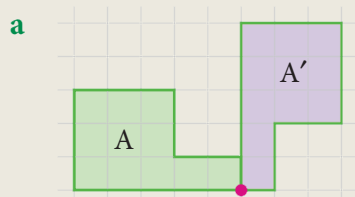


The shape has been rotated _____
in a _____ direction.



The shape has been reflected in a
horizontal/vertical mirror line.

- 2 Describe each of the transformations that have taken place as a translation, rotation or reflection.



- 3 Describe fully each of the transformations in question 2.

thinking about your thinking

When two shapes are shown in a diagram, how can you tell which one is the original shape and which one is its image?