S3.1 Reflections

This spread will show you how to:

- Recognise and visualise reflections
- Understand that reflections are specified by a mirror line
- Transform triangles and other shapes by reflection

Keywords

Mirror line
Reflection
Transformation

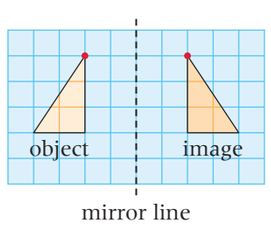
A **transformation** can change the size and position of a shape.

- **A reflection flips the shape over.**

When you look at yourself in a mirror, you are seeing a reflection.

You specify a **mirror line** or reflection line to reflect the object.

To find the position of the reflection line you choose corresponding points on the object and the image.

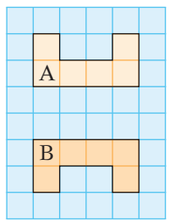


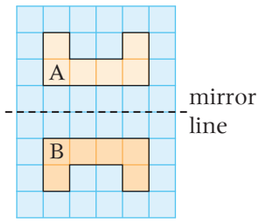
Each dot is 2 units from the mirror line.

- **The image is the same distance from the mirror line as the object.**

Example

Draw the mirror line so that shape B is a reflection of shape A.

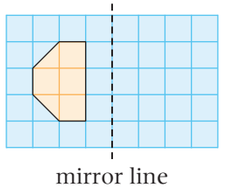


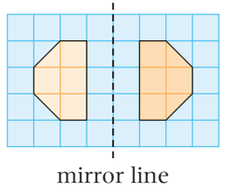


You can rotate the page to make the mirror line vertical.

Example

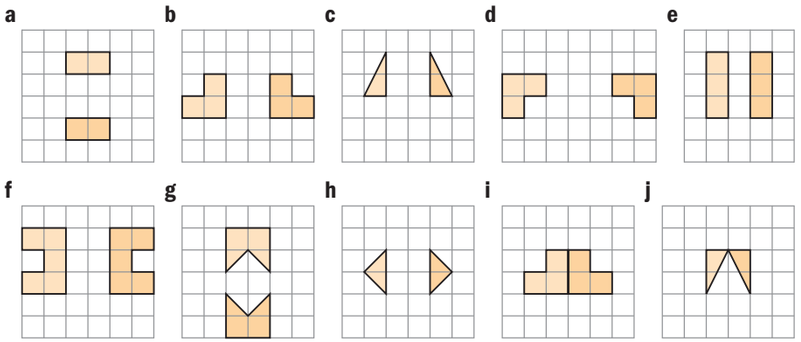
Draw the reflection of the shape using the mirror line.



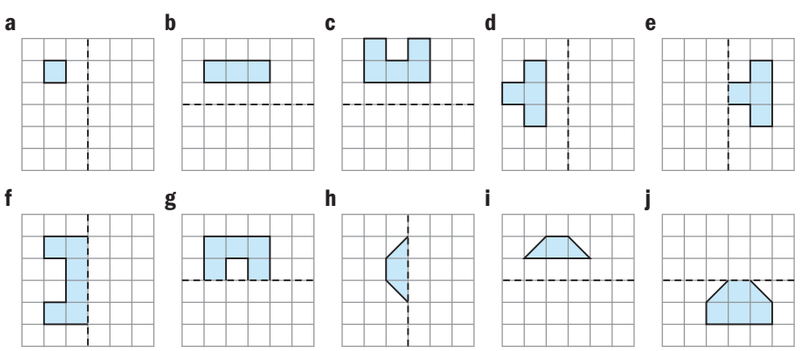


Exercise S3.1

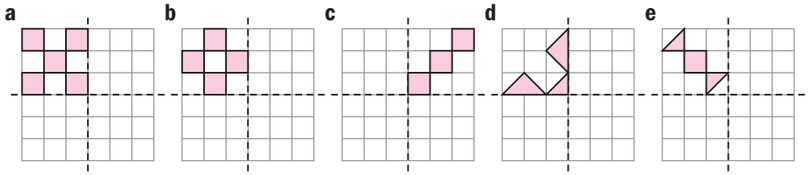
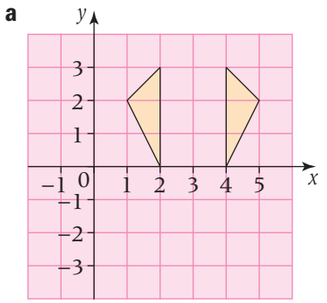
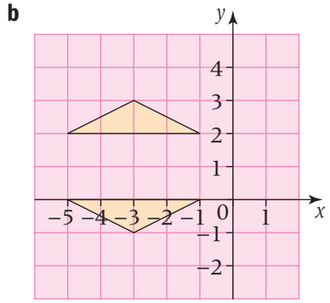
1 Copy the diagrams and draw the mirror lines.



2 Copy and complete each diagram to show the reflection of the shape in the mirror line.



3 Copy the diagrams.
Reflect the shapes in both mirror lines to create a pattern.



4 Give the equation of the mirror line for each reflection.