



Rotation

- Describing a rotation
- Rotating a shape using tracing paper
- Rotating a shape on a coordinate grid

Keywords

You should know

explanation 1a

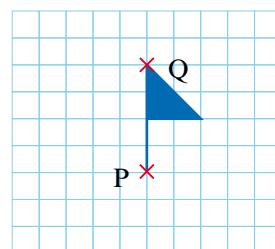
explanation 1b

- 1** Copy this diagram onto squared paper.

Show the new position of the shape after a clockwise rotation of 90° with centre

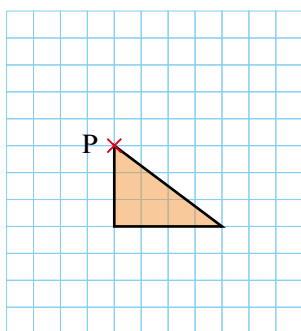
a P

b Q

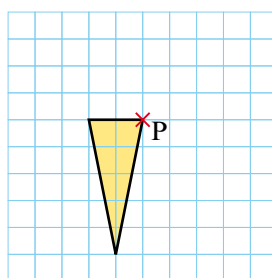


- 2** Copy these diagrams onto squared paper. Show the new position of each shape after an anticlockwise rotation of 90° with centre P.

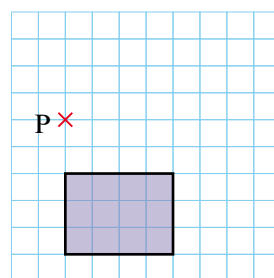
a



b

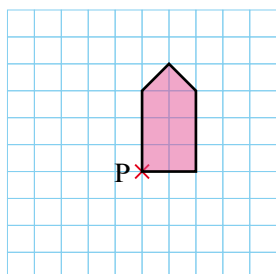


c

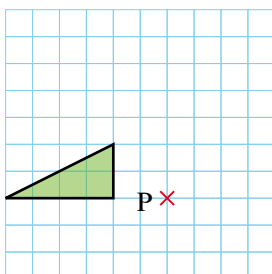


- 3** Copy these diagrams onto squared paper. Show the new position of each shape after a clockwise rotation of 90° with centre P.

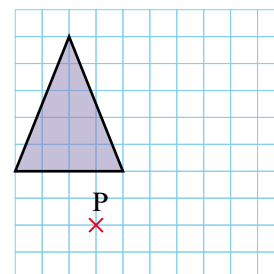
a



b



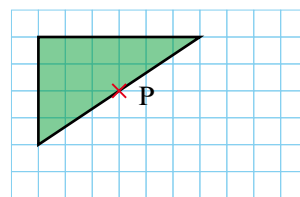
c



- 4** Copy the diagram onto squared paper.

Rotate the triangle through 180° with centre P.

Explain why it isn't necessary to give the direction of rotation.

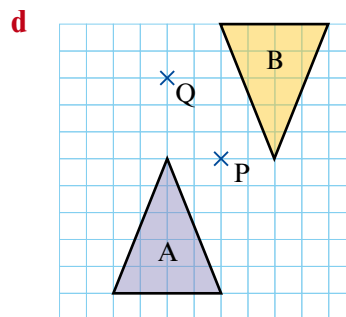
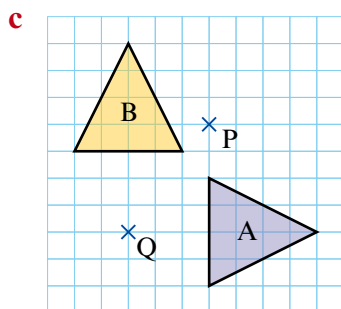
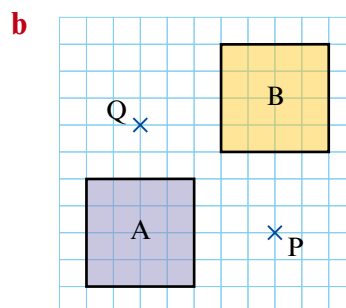
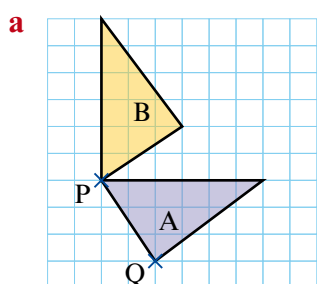


- 5** Each diagram shows a rotation that maps shape A to shape B.

In each diagram the centre of rotation is *either* P or Q.

Decide which point is the centre of rotation and then describe the rotation.

(Remember to describe the angle, direction and centre.)



- 6** Copy this diagram onto squared paper.

- Rotate triangle A through 90° clockwise with centre $(0, 0)$. Label the image B.
- Rotate triangle A through 90° anticlockwise with centre $(0, 0)$. Label the image C.
- Rotate triangle A through 180° with centre $(0, 0)$. Label the image D.

