

Rotation of shapes about a point

WHAT THIS LESSON TEACHES

A rotation turns a shape around a fixed point. The shape keeps its size and shape but changes facing direction and position.

→ A flag at a point turned 90° clockwise about the pin.

→ A shape rotated 180° about a marked vertex on the grid.

MODEL THIS ON THE BOARD

ROTATE THE L-SHAPE 90° CLOCKWISE ABOUT C

- 1 Mark centre point C on the grid.
- 2 Count the squares from C to each vertex of the L-shape.
- 3 Turn each vertex 90° clockwise around C to its new position.
- 4 Join the new vertices to draw the rotated L-shape.

ANSWER KEY

Scaffold: visual check on the page

Q1: (none)

Q2: (none)

Q3: (-1, 2)

Q4: (none)

a) Always — Both directions move the shape to the identical final position.

b) Never — They move the shape to two different positions.

c) Never — A rotation keeps the shape the same size and shape.

d) Sometimes — Any point including a vertex can be chosen as the fixed centre.

EXTENSION SHEET · STRETCH ANSWERS

S1: reflection

S2: 1 line

S3: 8 lines

S4: reflection