



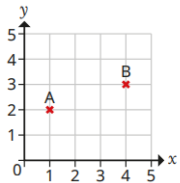
Year 4 Maths: Geometry -Position and direction.

What should I already know?

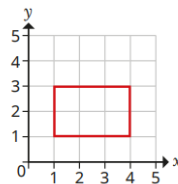
- Use vocabulary to describe position, direction and movement.
- Distinguish between rotation as a turn and identify clockwise and anticlockwise.
- Identify quarter, half and three quarter turns and links these to right angles.
- Identify shapes in patterns and sequences linked to turns.

Key Knowledge

Describe position using co-ordinates in the first quadrant:



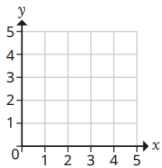
A = (1,2)
B = (4, 3)



Label each vertex with a letter and write the co-ordinates.

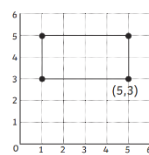
Read co-ordinates as (x axis, y axis)

Plot co-ordinates: plot (4,1)



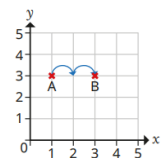
1. Find 4 on the x-axis and draw a vertical line.
2. Find 1 on the y-axis and draw a horizontal line.
3. Where the two lines meet, draw a cross.

Plot points and create given polygons:

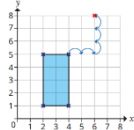


Plot (5,3); (1,3); (1,5); (5,5)
Join each point to create a polygon.

Translate points and polygons:

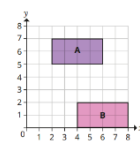


Translate A 2 squares to the right (B).



Translate the polygon labelling each point A, B, C, D

Describe translations:



Choose one point on shape A and describe how it has moved: 2 points right and 5 points down.

Key Vocabulary and definitions

| | |
|--------------------|---|
| Axis/Axes | Vertical (y) and horizontal (x) lines drawn to make a quadrant. |
| Quadrant | A region enclosed by the x-axis and y-axis. |
| Co-ordinate | Numbers which specify a point (x,y) on a map or grid. |
| Scale | The units which the scale is divided. |
| Plot | To draw on a map or graph. |
| Polygon | A 2-D shape with straight sides that are fully closed. |
| Translation | Moves every point in a shape by the same distance in the same direction without rotating or resizing. |
| x-axis | The horizontal line drawn on an axis. |
| y-axis | The vertical line drawn on an axis. |
| Vertex | The corner of a shape where 2 lines meet. |
| Vertices | More than one vertex. |

