

Rotate an Object around a Given Coordinate

Maths

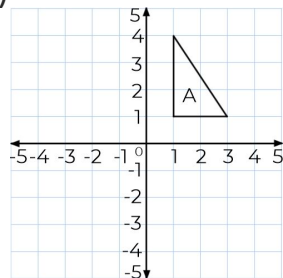
Miss Davies



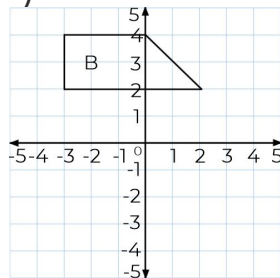
Rotate an Object around a Given Coordinate

1. Rotate each shape the stated degrees, centre point (0, 0).

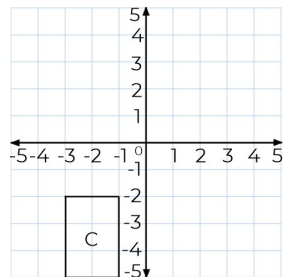
a) 90° clockwise



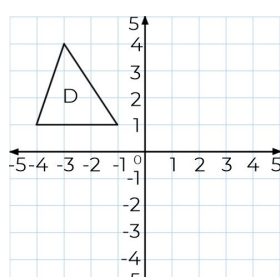
b) 270° clockwise



c) 180°



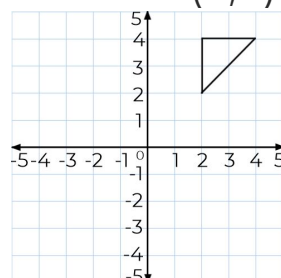
d) 180°



2. Rotate each shape as described.

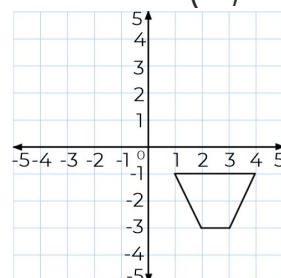
a) 90° clockwise

centre (2, 1)

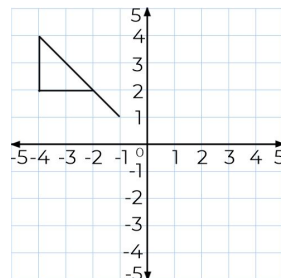


b) 90° anticlockwise

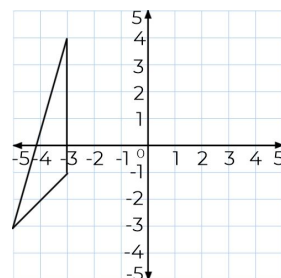
centre (-1, -1)



c) 180°, centre (0, 1)



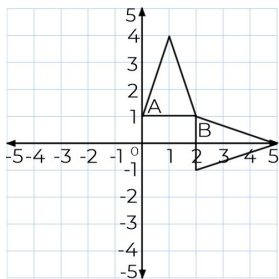
d) 180°, centre (-3, 1)



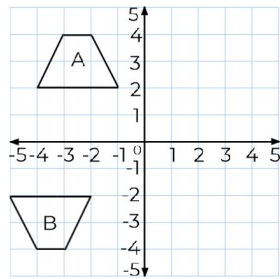
Rotate an Object around a Given Coordinate

3. Describe the rotations from A to B.

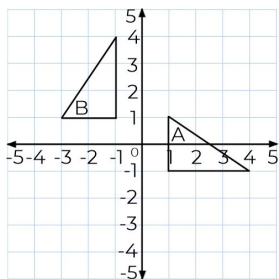
a)



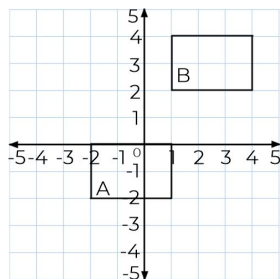
b)



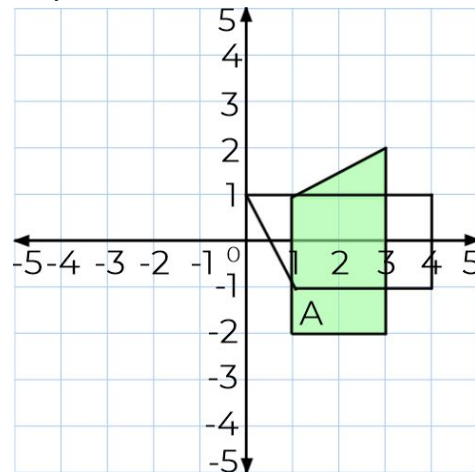
c)



d)



4. Michael thinks he has rotated shape A (shaded) 90° anticlockwise, around point $(0, 0)$.



Michael is wrong.

What rotation has he done?



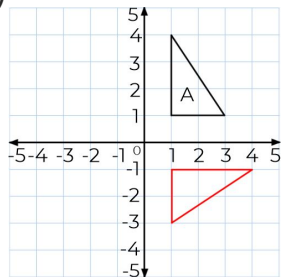
Answers



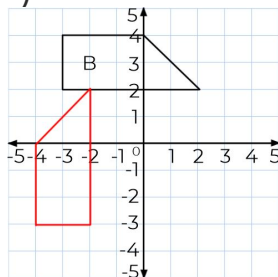
Rotate an Object around a Given Coordinate

1. Rotate each shape the stated degrees, centre point (0, 0).

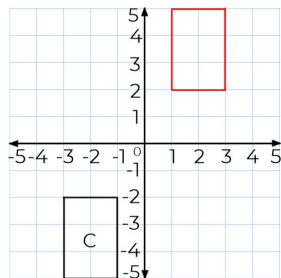
a) 90° clockwise



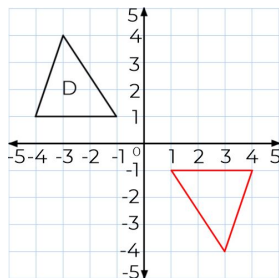
b) 270° clockwise



c) 180°



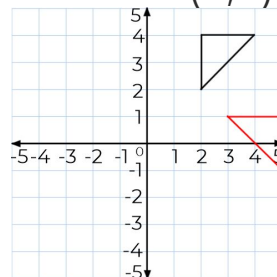
d) 180°



2. Rotate each shape as described.

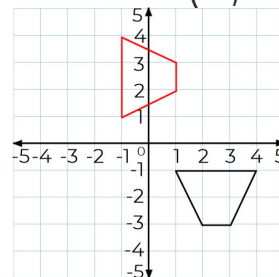
a) 90° clockwise

centre (2, 1)

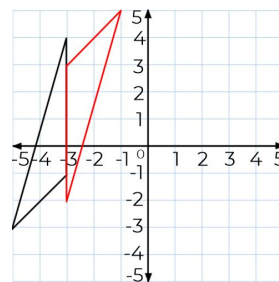
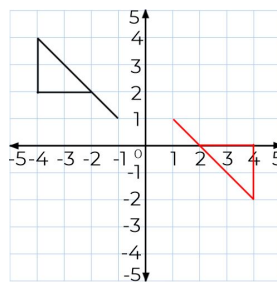


b) 90° anticlockwise

centre (-1, -1)



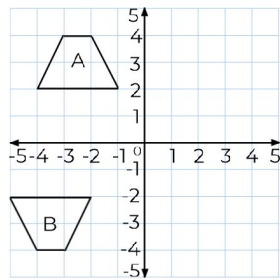
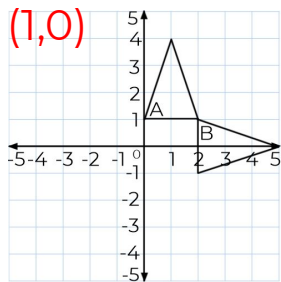
c) 180°, centre (0, 1) d) 180°, centre (-3, 1)



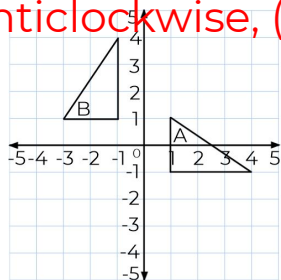
Rotate an Object around a Given Coordinate

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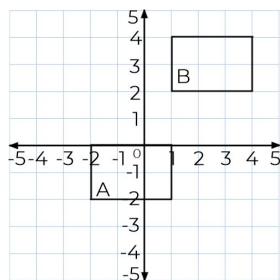
a) 90° clockwise b) $180^\circ, (-3,0)$



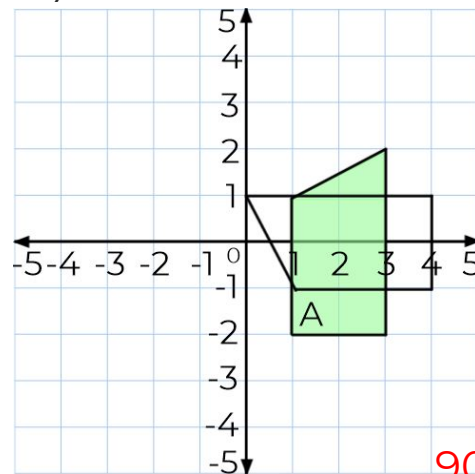
c) 90°
anticlockwise, $(-1,-1)$



d) $180^\circ, (1,1)$



4. Michael thinks he has rotated shape A (shaded) 90° anticlockwise, around point $(0,0)$.



Michael is wrong.

What rotation has he done?

90°
anticlockwise,
centre $(2,0)$

