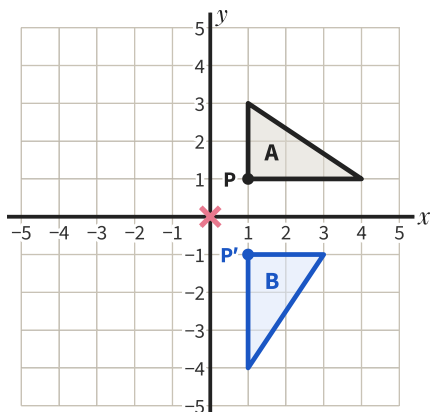


Rotating Shapes

ANSWERS

1

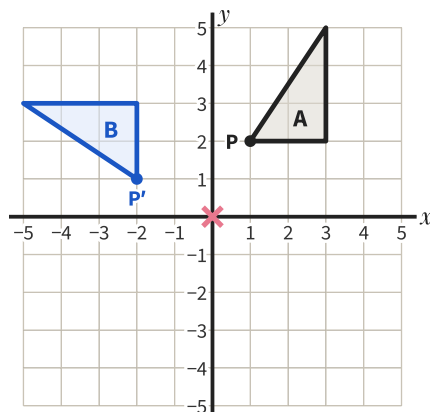
Rotate A 90° clockwise about (0, 0).



P' (1, -1)

2

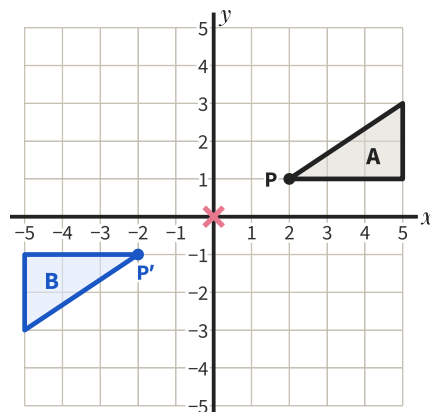
Rotate A 90° anticlockwise about (0, 0).



P' (-2, 1)

3

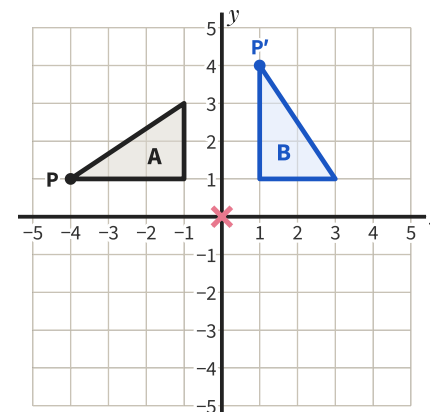
Rotate A 180° about (0, 0).



P' (-2, -1)

4

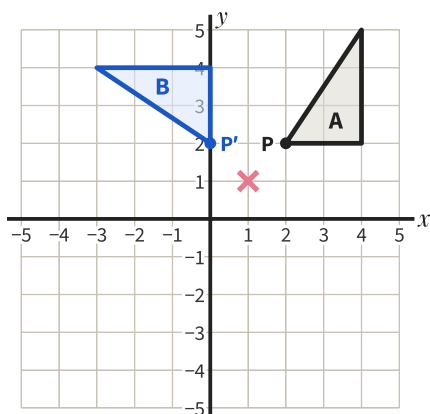
Rotate A 90° clockwise about (0, 0).



P' (1, 4)

5

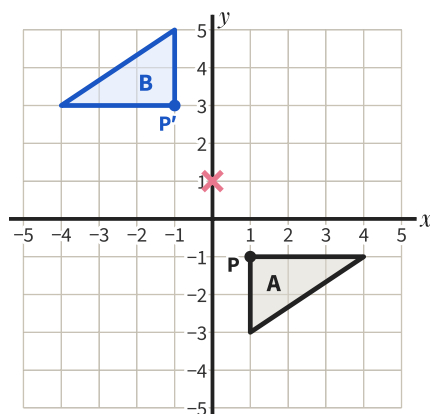
Rotate A 90° anticlockwise about (1, 1).



P' (0, 2)

6

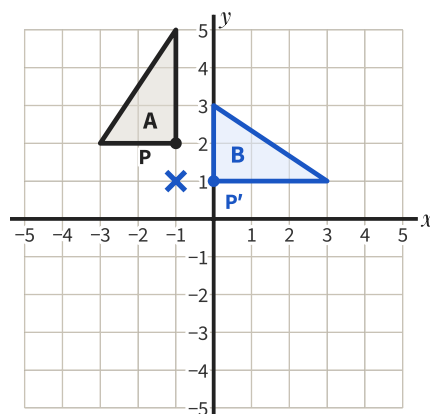
Rotate A 180° about (0, 1).



P' (-1, 3)

7

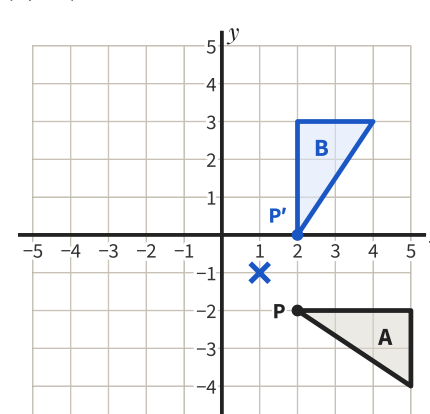
Rotate A 90° clockwise about (-1, 1).



P' (0, 1)

8

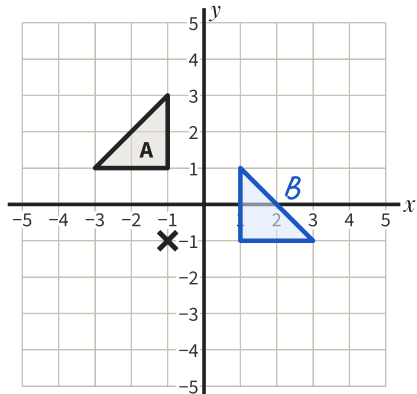
Rotate A 90° anticlockwise about (1, -1).



P' (2, 0)

9

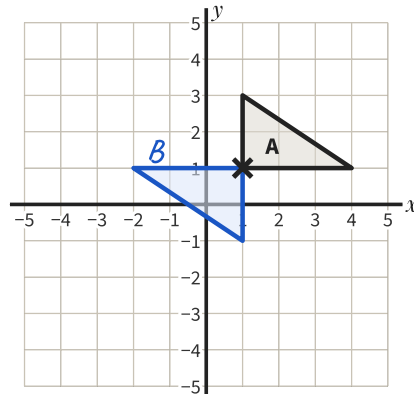
Rotate shape A 90° clockwise about $(-1, -1)$. Label the image B.



Corners $(1, 1), (1, -1), (3, -1)$

10

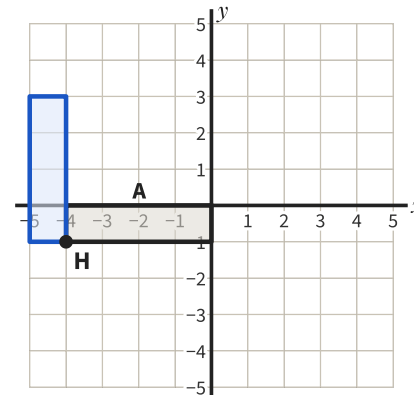
Rotate shape A 180° about $(1, 1)$. Label the image B.



Corners $(1, 1), (-2, 1), (1, -1)$

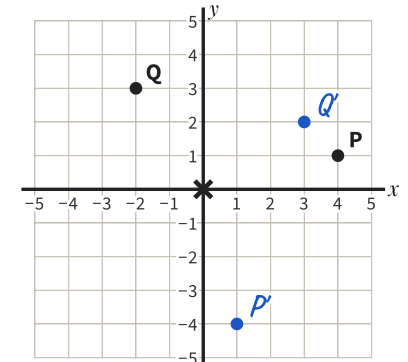
11

This plan shows a gate A. It swings open by turning 90° anticlockwise about its hinge H. Draw the gate when it is open.



12

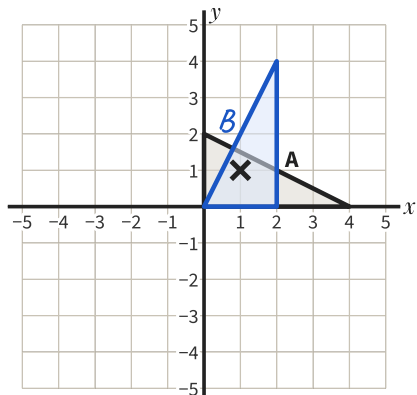
Rotate the points P and Q 90° clockwise about $(0, 0)$. Write the coordinates of their images.



Images $P' (1, -4), Q' (3, 2)$

13

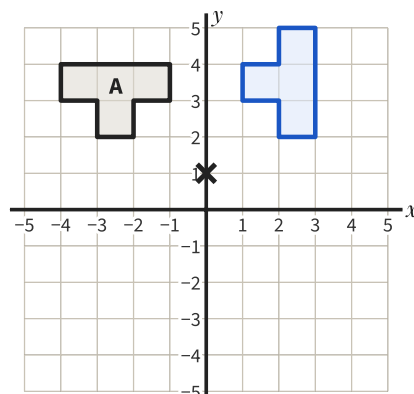
Rotate shape A 90° anticlockwise about $(1, 1)$. Label the image B.



Corners $(2, 0), (2, 4), (0, 0)$

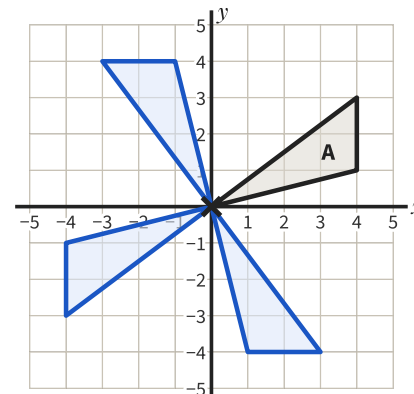
14

In a puzzle game, the T shaped piece A is turned 90° clockwise about $(0, 1)$. Draw where it lands.



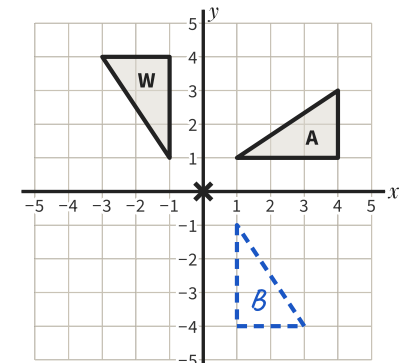
15

Blade A of a fan is drawn. Rotate it 90° clockwise about $(0, 0)$, then rotate the new blade 90° clockwise again, and again. Draw the other three blades.



16

Ali rotates shape A 90° clockwise about $(0, 0)$. He draws shape W. Explain Ali's mistake.



Answer *he turned it anticlockwise*