

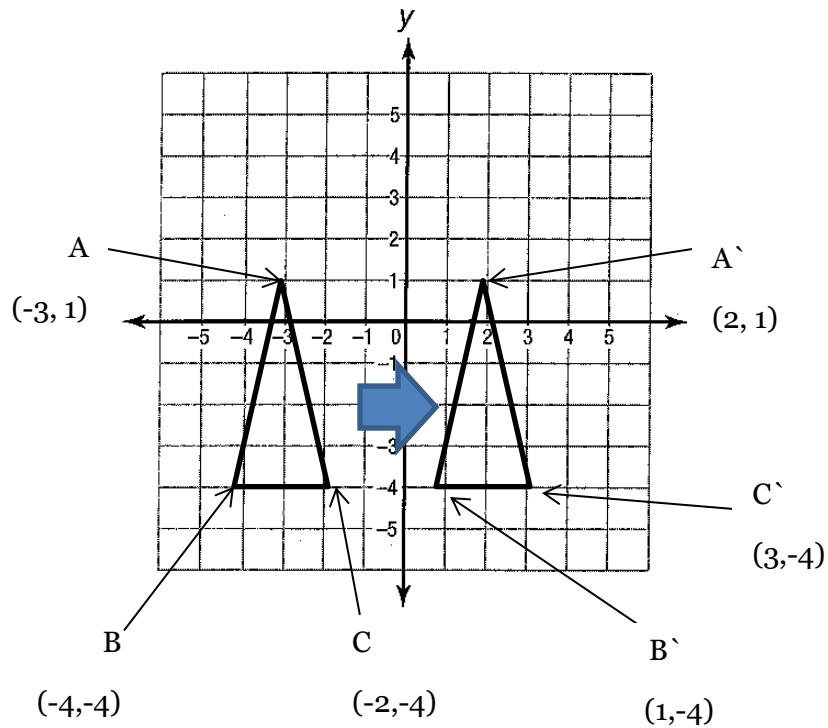
Notes

Topic 09: Transformations

Translation

(Sliding the figure)

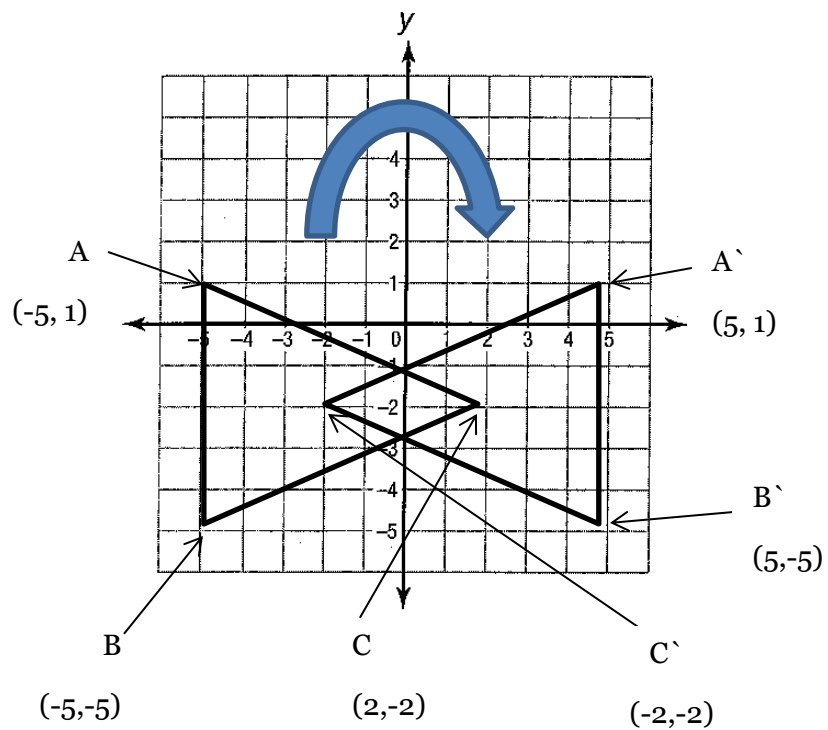
Here, triangle ABC is translated **5 spaces** to the right



Reflection

(flipping the figure)

Here, triangle ABC is reflected over the **y-axis**



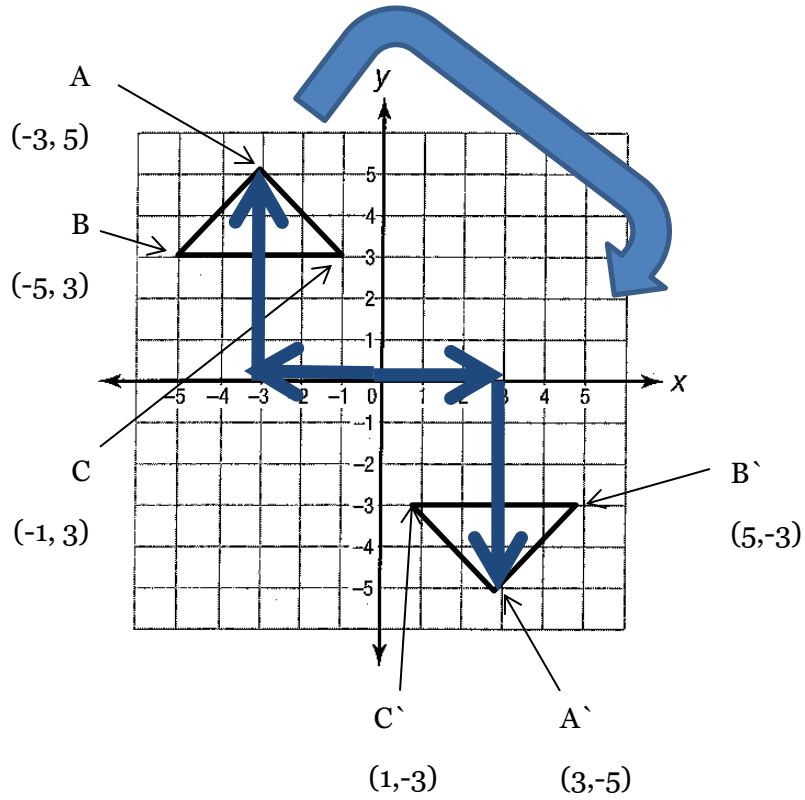
Notes

Rotation

(turning the figure)

Here, triangle ABC is rotated 180 degrees clockwise

Note C to C' is (-1, 3) to (1, -3)

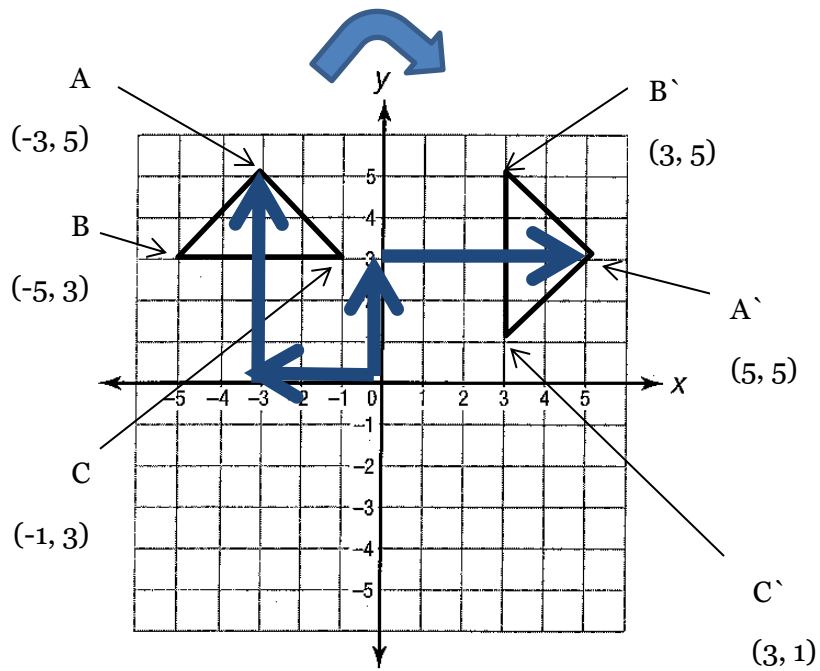


Rotation

(turning the figure)

Here, triangle ABC is rotated 90 degrees clockwise

Note C to C' is (-1, 3) to (3, 1)

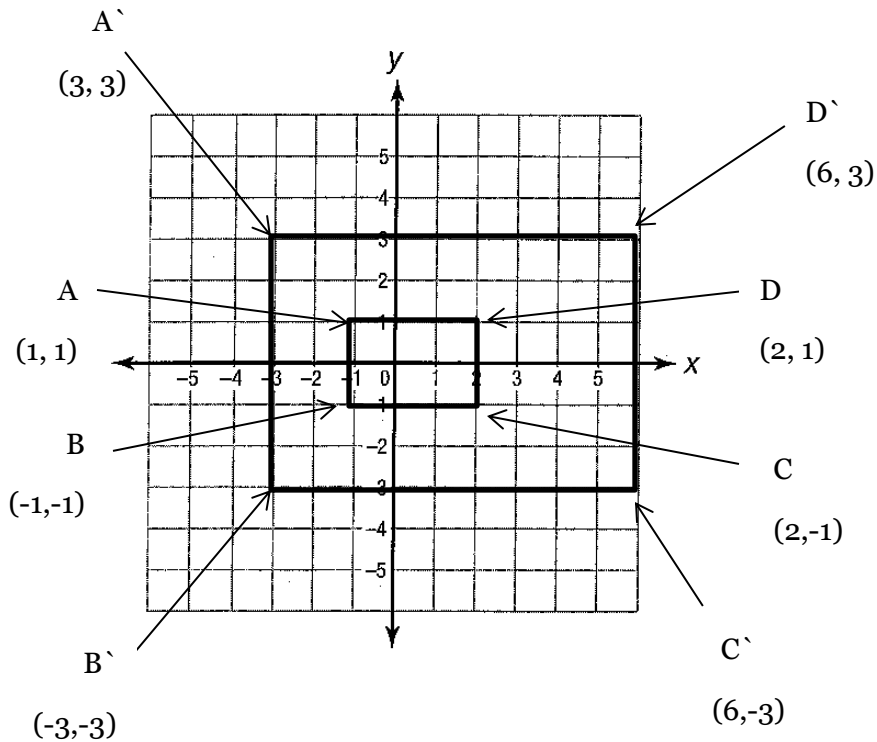


Notes

Dilation

(inflating or deflating the figure)

Here, rectangle ABCD is dilated by a **factor of 3**



Congruent → Same size and same shape.

When you “translate” or “reflect” or “rotate”, you get a congruent shape.

Similar → Same proportions, different size.

When you “dilate”, you get a similar shape.

All congruent figures are also similar figures.

(Like all squares are also rectangles)