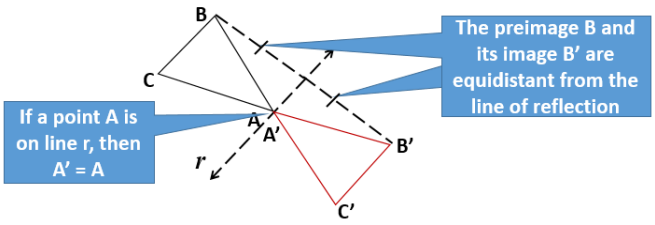
Lesson 4.2 Reflections

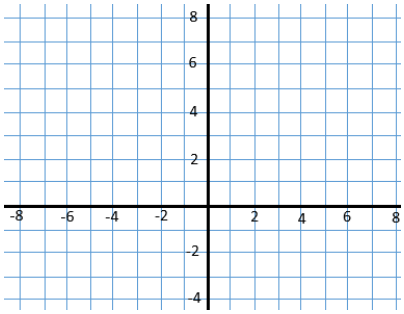
Name _____ Period _____

Notes

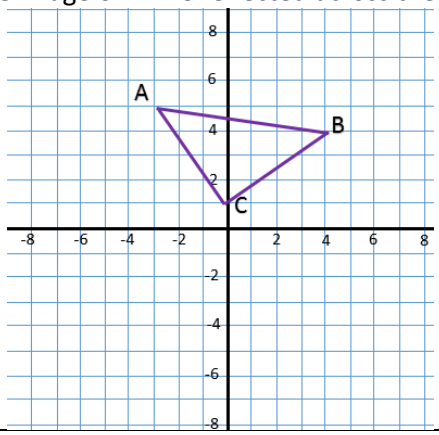
A reflection is



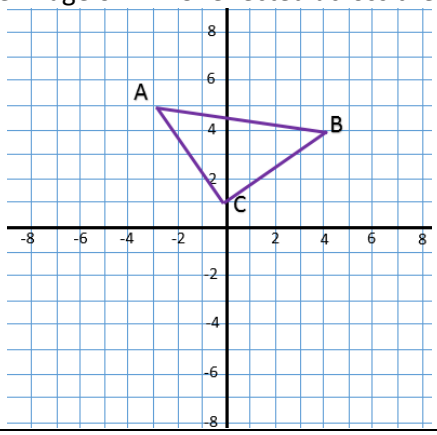
Find the image of P(3, 4) reflected across the line $x = -x$.



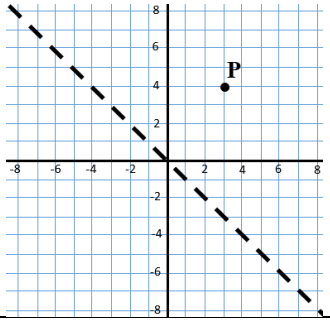
What is the image of ΔABC reflected across the x-axis?



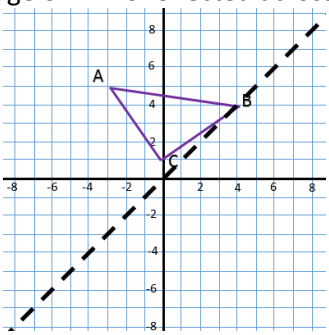
What is the image of ΔABC reflected across the y-axis?



What is the image of P(3, 4) reflected across the line $y = -x$?



What is the image of ΔABC reflected across the line y = x?



Coordinate Rules for Reflections

If (a, b) is reflected in the x-axis, then _____

If (a, b) is reflected in the y-axis, then _____

If (a, b) is reflected in the line y = x, _____

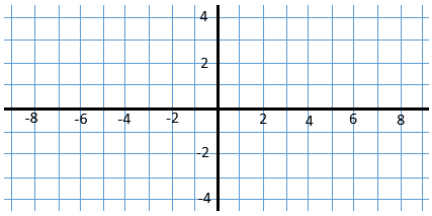
If (a, b) is reflected in the line y = -x, then _____

A glide reflection is a transformation that involves

Graph ΔABC with vertices A(3, 2), B(6, 3), and C(7, 1) and its image after the glide reflection.

Translation: (x, y) → (x – 12, y)

Reflection: in the x-axis



How many lines of symmetry does each hexagon have?