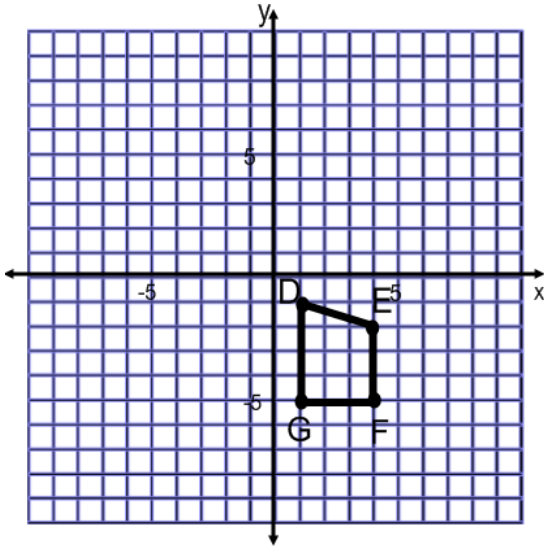


# Rotations & Transformations

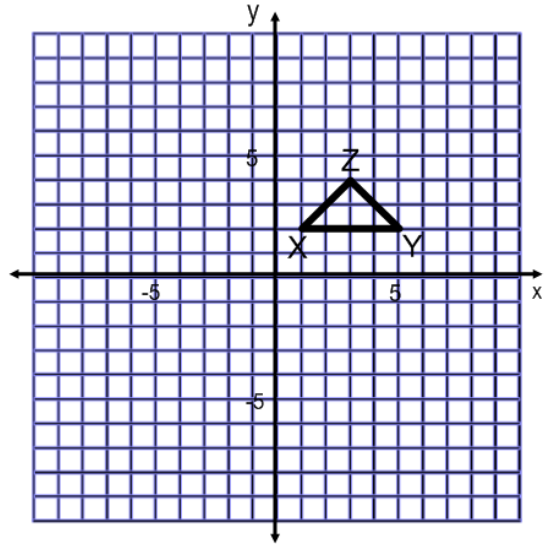
Name \_\_\_\_\_ Hr \_\_\_\_\_

Perform the following transformations. Then write the coordinates of the new figure.

1. Rotate DEFG 90° counter-clockwise around the origin.

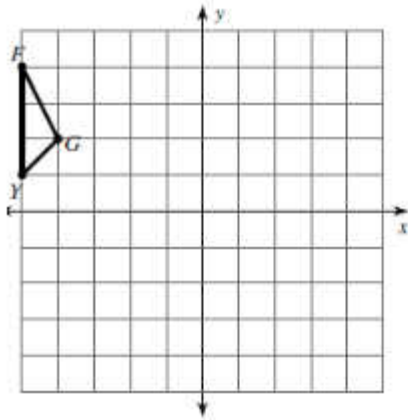


4. Rotate triangle XYZ 180° around the origin.



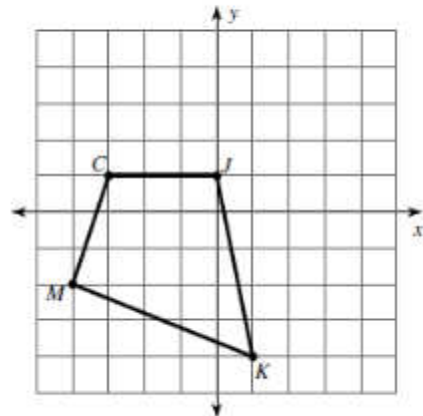
2. translation: 4 units right and 1 unit down

2.

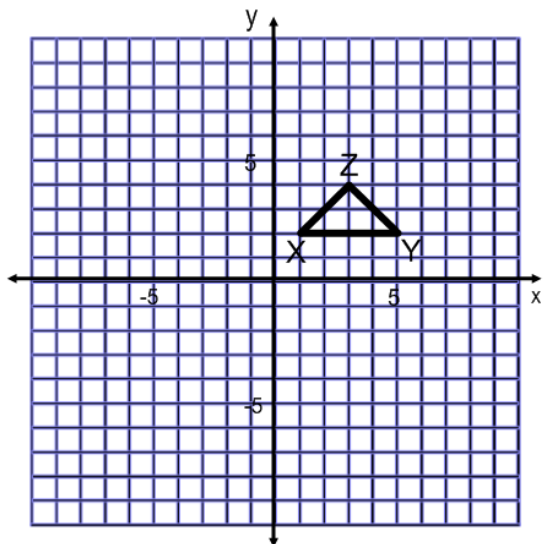


5.

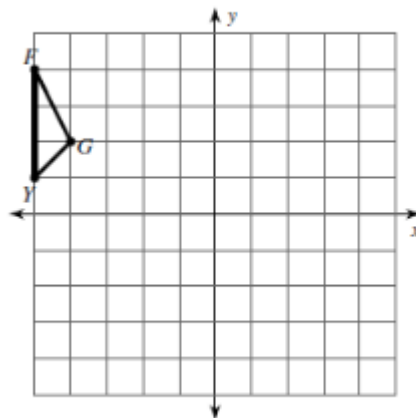
reflection across the x-axis



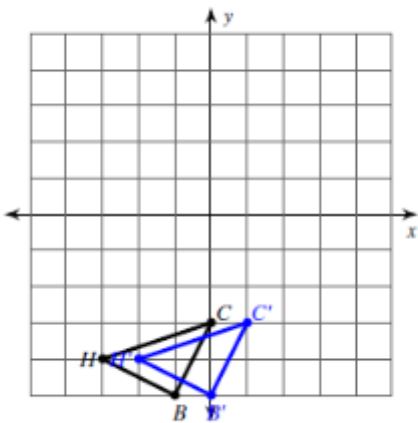
3. Rotate triangle XYZ 180° around point Z.



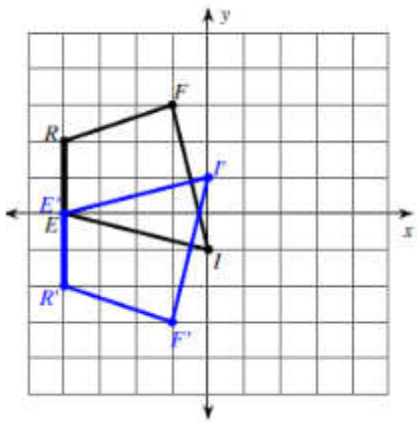
6. rotation 270° counterclockwise around the origin



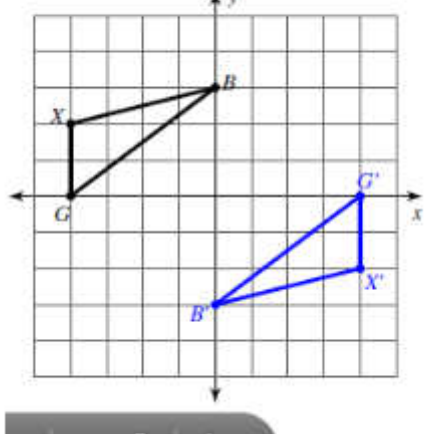
7. Write which transformation was performed between BCH and B'C'H'.



8. Write which transformation was performed between DRFI and D'R'F'I'.



9. Write which transformation was performed between BGX and B'G'X'.



10. Write the coordinates of the figure after the translation.

$$(x, y) \rightarrow (x + 7, y - 1)$$

J(-3, 1), F(-2, 3), N(-2, 0)

J'( ) F'( ) N'( )

11. Write the new coordinates of the figure after a reflection over the y-axis.

A(1,3) B(4,4) C(2, -1)

A'( ) B'( ) C'( )