

# Transformations Mixed Review

## Geometry

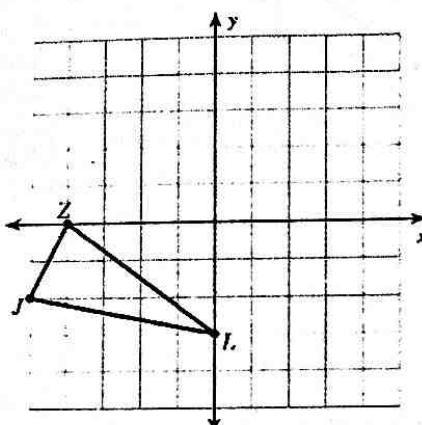
### All Transformations

Name \_\_\_\_\_

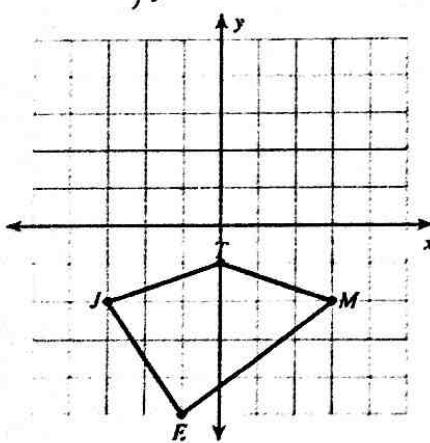
Date \_\_\_\_\_ Period \_\_\_\_\_

Graph the image of the figure using the transformation given.

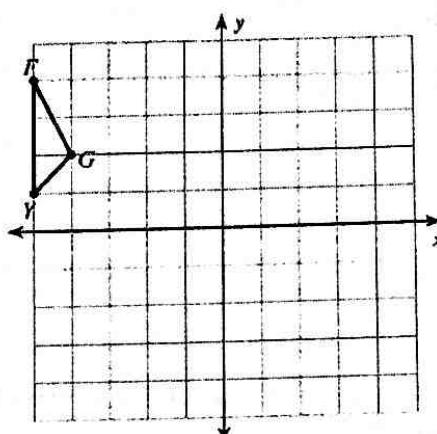
- 1) rotation
- $90^\circ$
- counterclockwise about the origin



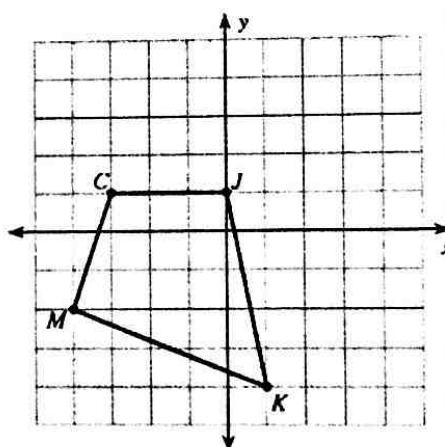
3.  $(x, y) \rightarrow (x+1, y+1)$



2)  $(x, y) \rightarrow (x+4, y-1)$

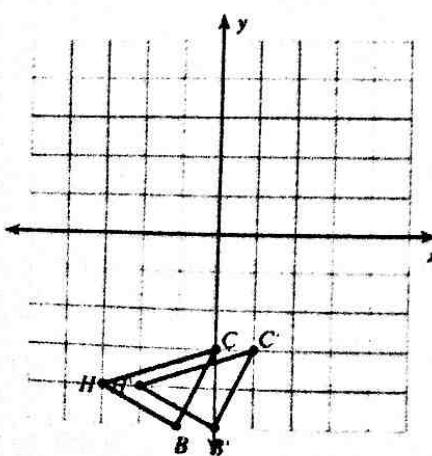


4) reflection across the x-axis

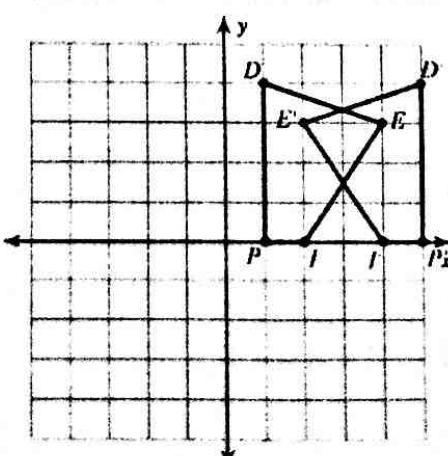


Write a rule to describe each transformation.

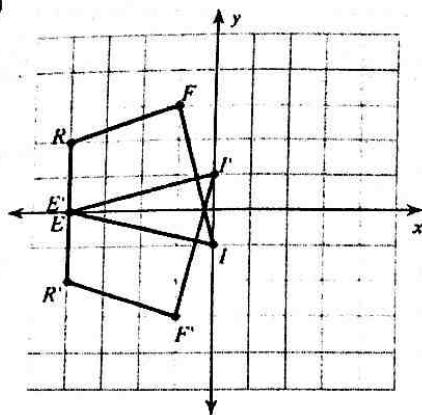
5)



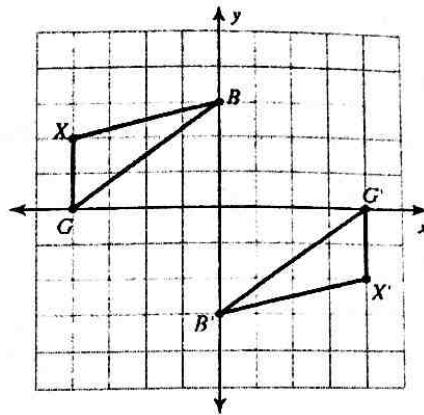
6)



7)



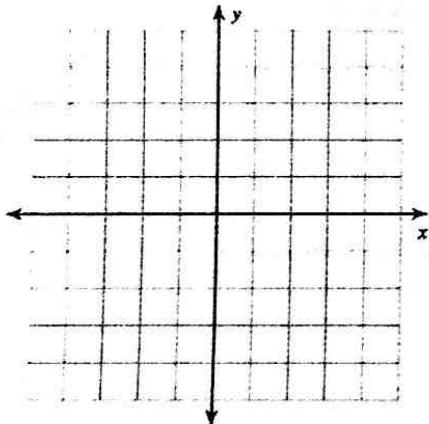
8)



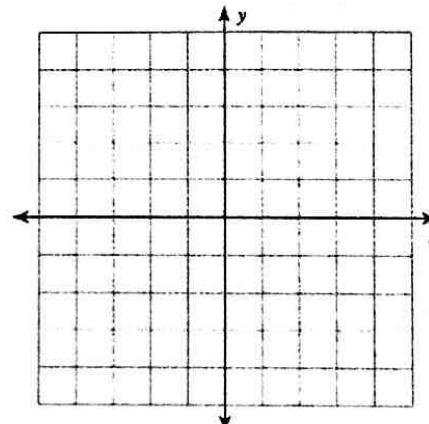
Graph the image of the figure using the transformation given.

*Counter*

- 9) rotation  $90^\circ$  clockwise about the origin  
 $B(-2, 0), C(-4, 3), Z(-3, 4), X(-1, 4)$



- 10) reflection across  $y = \text{[x] } S$   
 $K(-5, -2), A(-4, 1), J(0, -1), J(-2, -4)$



Find the coordinates of the vertices of each figure after the given transformation.

- 11) rotation  $180^\circ$  about the origin  
 $E(2, -2), J(1, 2), R(3, 3), S(5, 2)$

- 12) reflection across  $y = \text{[x] } S$   
 $J(1, 3), U(0, 5), R(1, 5), C(3, 2)$

- 13) Translation by  $\langle 7, -1 \rangle$   
 $J(-3, 1), F(-2, 3), N(-2, 0)$

- 14)  $(x, y) \rightarrow (x+6, y-3)$   
 $S(-3, 3), C(-1, 4), W(-2, -1)$