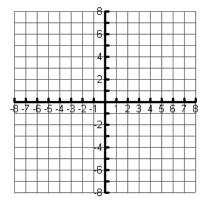
Name	
Period	

Date \_\_\_\_\_

## For 1 & 2, find the coordinates of the image after the given reflection.

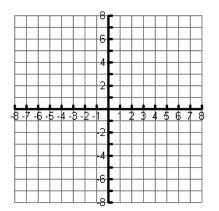
1. M(3, 4) reflected over the line y = 1



2. P(-2, 3) reflected over the line x = -3

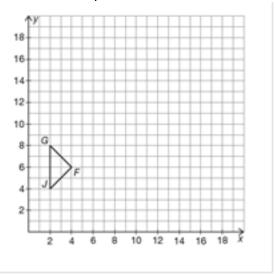
The vertices of  $\triangle$ ABC are A(-4,4), B(0,7), and C(-1,3). Reflect  $\triangle$ ABC about the first line. Then reflect  $\triangle$ A'B'C' about the second line. Graph  $\triangle$ A'B'C' and  $\triangle$ A''B''C''.

3. About y = 4, and then about y = 1

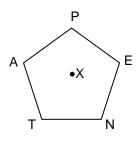


## Use triangle JGF to do the following transformations:

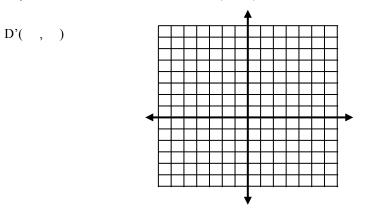
4. Reflect over the line x = 6, then translate up 5 units.



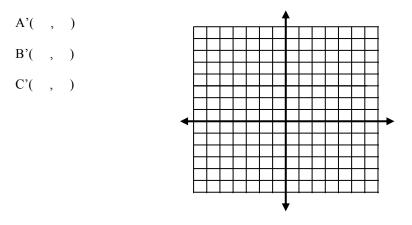
- 5. Regular pentagon PENTA is given with center X
  - a) name the image E under a  $72^{\circ}$  rotation about X.
  - b) name the image of P under a  $216^{\circ}$  rotation about X.



6. Rotate the point whose coordinates are D(-2, 1) 270° about the origin



7. Rotate  $\triangle$ ABC whose coordinates are A(3, 2), B(3, 6), C(6, 1) 90° about the origin.



- 8. a) Deterimine if the figure has rotational symmetry.
  - b) Determine if the figure has reflectional symmetry, and if so, how many lines?

