Math 2
Unit 1 – Geometric Transformations
Unit TEST Review - Classwork

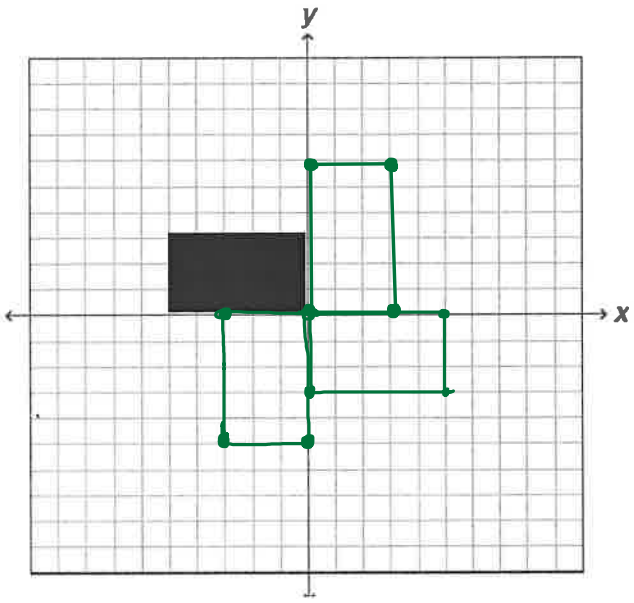
Name_____
Date_____ Pd_____

1. Rotate the rectangle about the origin through angles of:

   a. 90 degrees

   b. 180 degrees

   c. 270 degrees

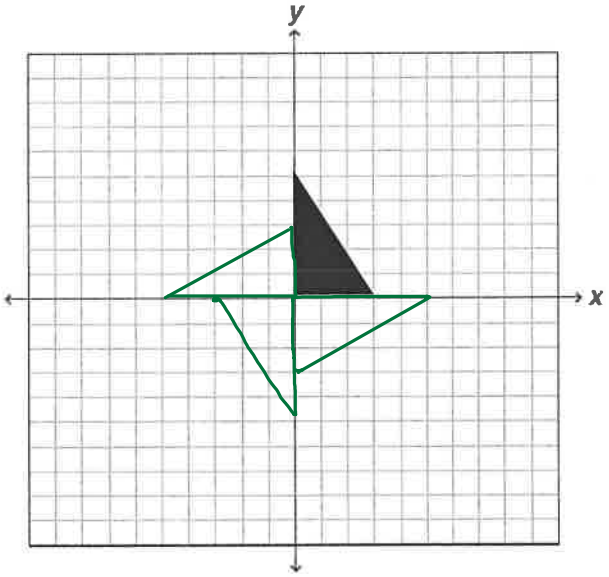


2. Rotate the triangle about the origin, using these angles:

   a. 90 degrees

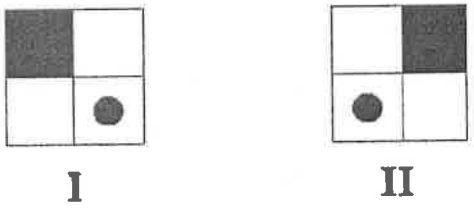
   b. 180 degrees

   c. 270 degrees



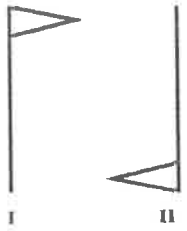
3. Study Figures I and II.
Which transformation of Figure I is shown in Figure II?

Reflection

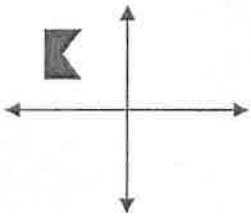


4. Study figures I and II.
Which transformation, if any, of Figure I is shown in Figure II?

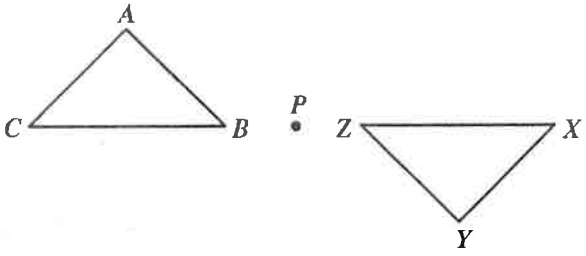
Rotation



5. Which represents a translation of the figure →



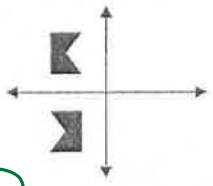
6. ΔXYZ was obtained from ΔABC by a rotation about the point P.



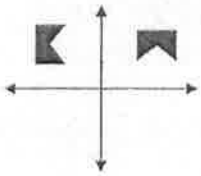
Write the correspondence of the vertices:

$A \rightarrow$ Y $\quad B \rightarrow$ Z $\quad C \rightarrow$ X

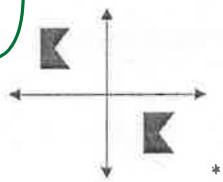
A



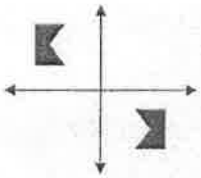
C



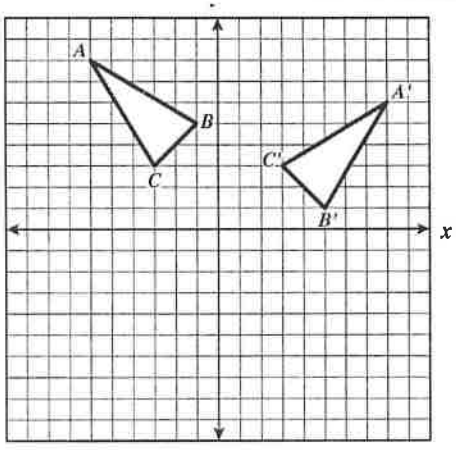
B



D

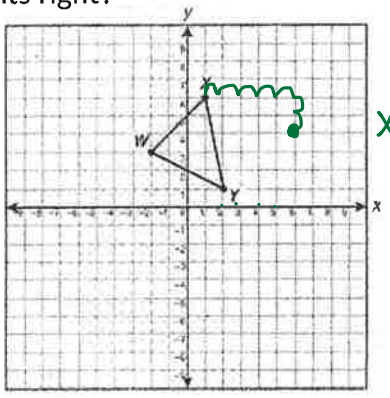


7. Triangle $A'B'C'$ is apparently →



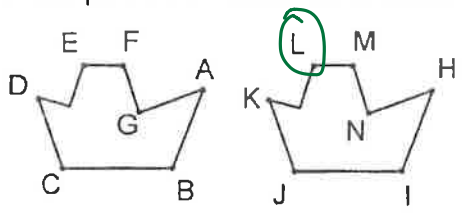
- O A. A translation of triangle *ABC* across the *x*-axis
- O B. A 90° clockwise rotation of triangle *ABC* about the origin
- O C. A reflection of triangle *ABC* across the *y*-axis
- O D. A reflection of triangle *ABC* across the *x*-axis

8. Name the image of ***X*** when triangle *WXY* is translated 2 units down and 5 units right?



X' = (6, 4)

9. Which point is a horizontal translation of E?



10. Write a rule for the composition if a point is

A. Rotated 270° , then reflected across $y = -x$ and finally translated 5 left and 7 up.

$(x,y) \rightarrow (y,-x) \rightarrow (x,-y) \rightarrow (x-5,-y+7)$

B. Rotated 270° , then translated 5 left and 7 up and finally reflected across $y = -x$.

$(x,y) \rightarrow (y,-x) \rightarrow (y-5,-x+7) \rightarrow (-(-x+7),-(y-5))$

$= (x-7,-y+5)$