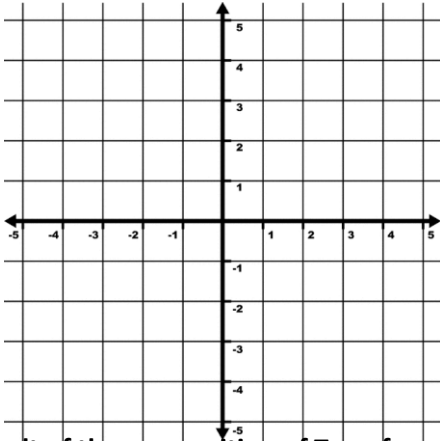


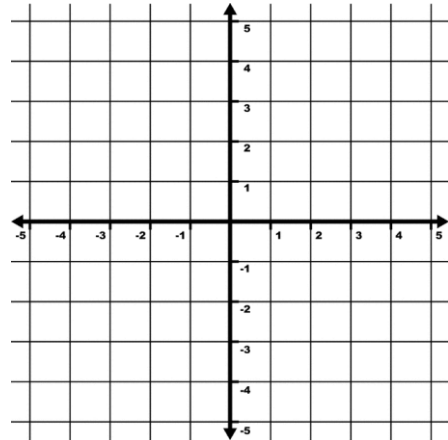
# Remediation on Rigid Motions

Name \_\_\_\_\_ Date \_\_\_\_\_ Blk \_\_\_\_\_

1. Find the coordinates for the image with the given vertices  $A(-2,-1)$ ,  $B(0,2)$ ,  $C(0,0)$ ,  $D(1,-1)$  after the translation  $(x, y) \rightarrow (x - 3, y + 2)$ . Draw the images.

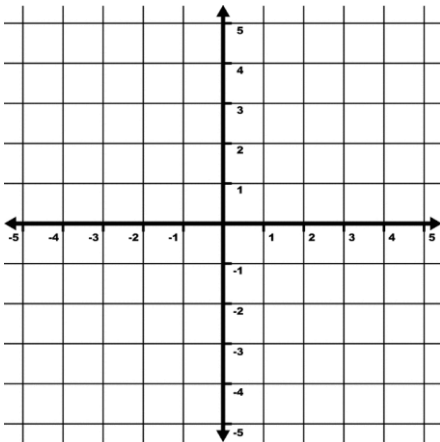


2. Reflect the figure with the given vertices across the given line,  $y = x$ .  $A(-5,2)$ ,  $B(4,1)$ ,  $C(-1,-2)$



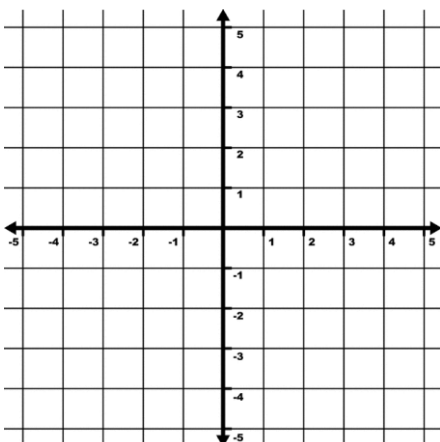
Draw the result of the composition of Transformations.

3. a.  $\triangle KLM$  has vertices  $K(-2,1)$ ,  $L(2,-1)$ , and  $M(-1,-3)$ . Rotate  $\triangle KLM$   $270^\circ$  Counter Clockwise about the origin and then reflect it across the  $x$ -axis.



- b. Write a generic coordinate for the above transformations

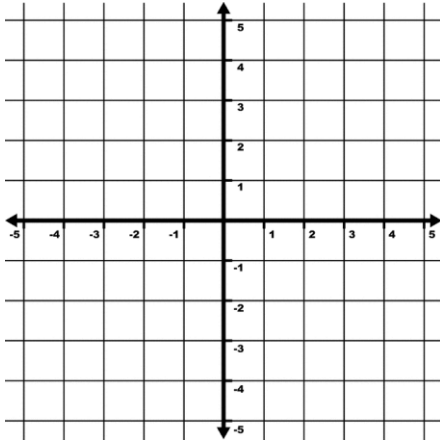
4.  $\square PQRS$  has vertices  $P(1,1)$ ,  $Q(3,1)$ ,  $R(4,-1)$ , and  $S(2,-2)$ . Rotate  $\square PQRS$   $180^\circ$  about the origin and then translate it right 5 units and down 3 units.



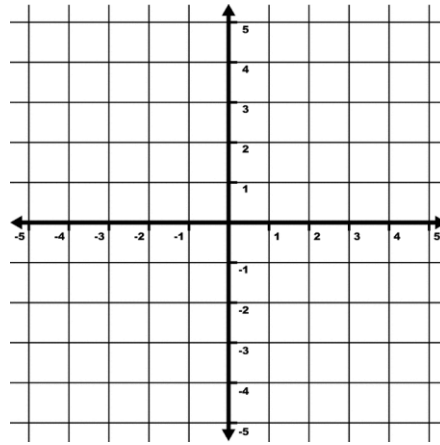
- b. Write a generic coordinate for the above transformations.

5.  $\triangle STR$  has vertices  $(0, -1)$ ,  $(2, 3)$ ,  $(-3, 4)$ . On graph a) Reflect the figure over line  $y = 2$ . On graph b) reflect the figure over  $x = 1$ .

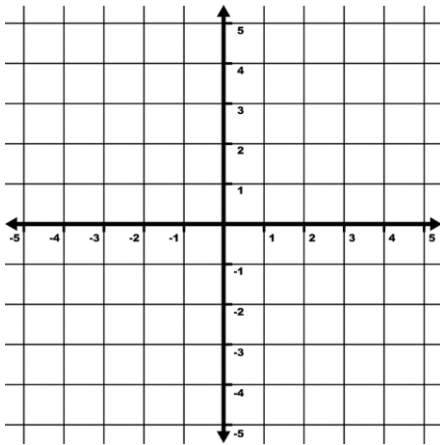
a)



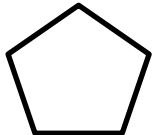
b)



6.  $\triangle JKL$  has vertices  $(2, 4)$ ,  $(3, -1)$ ,  $(-2, 2)$ . Rotate the figure 270° CCW around the center point  $(1, 2)$ .



7. What rotations about its center would a regular pentagon map onto itself from 0 to 360 degrees?



8. Identify or draw three regular polygons that would map onto themselves if rotated  $240^\circ$ .

9. How many lines of symmetry does a decagon have? How many does a parallelogram have?

10. Draw the lines of symmetry for the following figure

