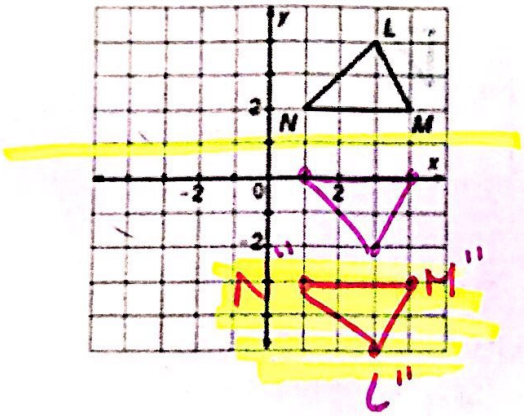
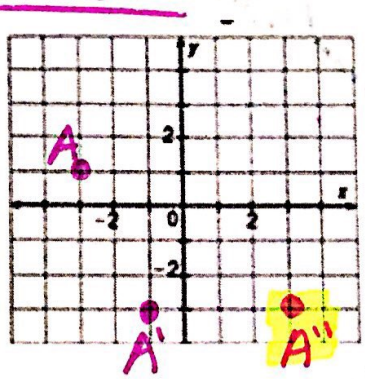
Graphing Sequences of Transformations

Graph the image after the indicated sequence of rigid transformations.

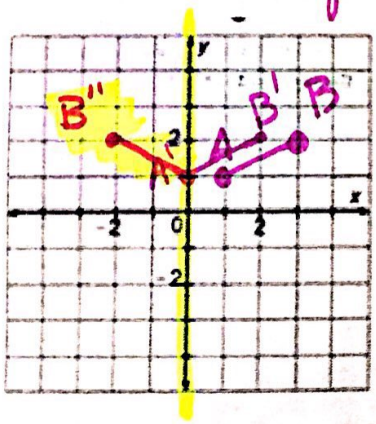
1. Reflect over y = 1 then translate 3 units down.



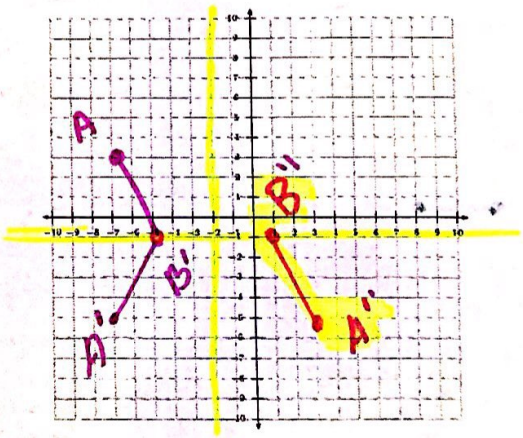
2. Rotate the point A (-3, 1) 90 degrees counterclockwise about the origin then translate 4 units to the right.



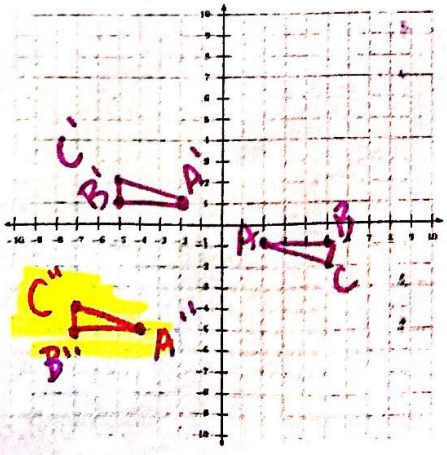
3. Translate the line segment with endpoints A(1,1) and B(3,2) one unit to the left then reflect over the line x = 0. (y-axis)



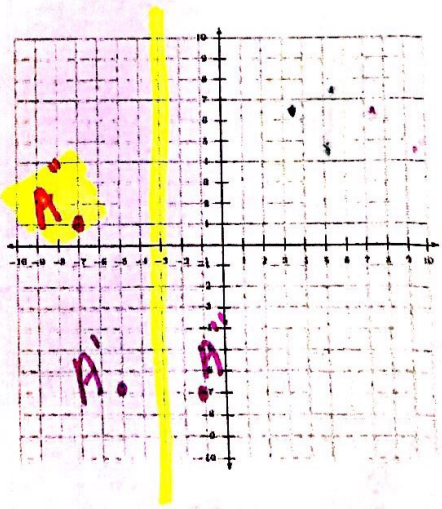
4. Reflect the line segment with endpoints A(-7,3) and B(-5, -1) over the line y = -1 Then reflect over the line x = -2



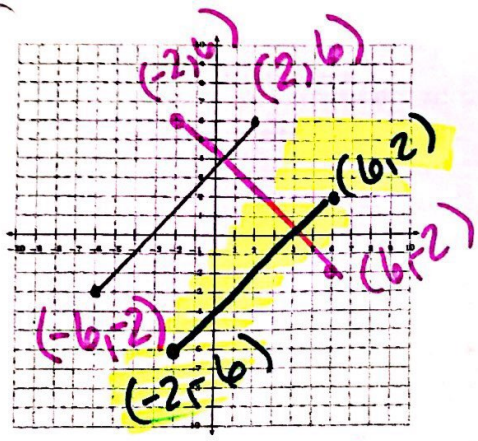
5. Triangle ABC has vertices A(2, -1), B(5, -1), C(5, -2). Rotate 180 degrees about the origin. Then translate 2 to the left and 6 down.



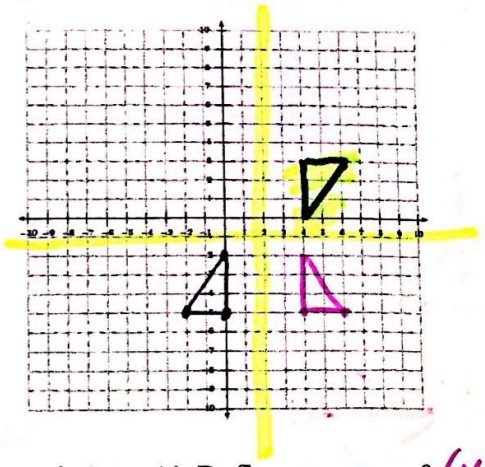
6. Reflect the point A(-5, -7) over the line x = -3. Then rotate 90 degrees clockwise about the origin.



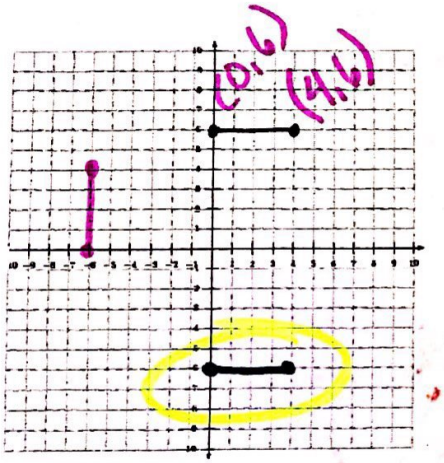
7. i. $A(x,y) \rightarrow A'(-x,y)$
ii. $A'(x,y) \rightarrow A''(x,-y)$



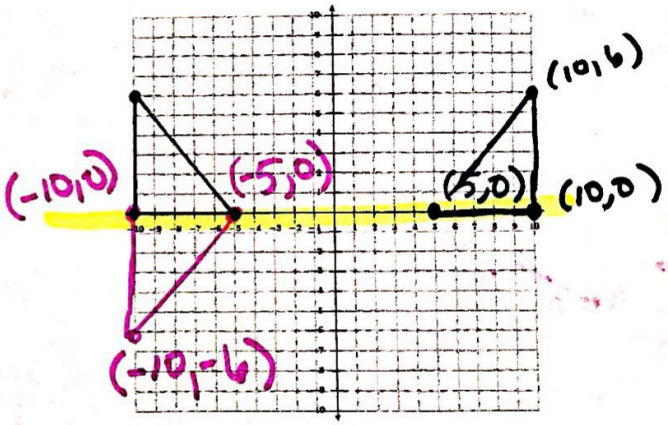
8. i. A → A' Reflect over $x = 2$
ii. A' → A" Reflect over $y = -1$



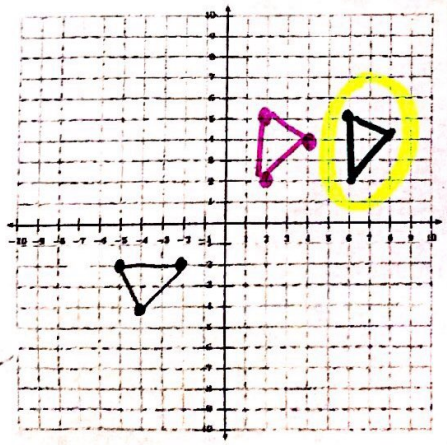
9. i. $A(x,y) \rightarrow A'(-y,x)$
ii. $A'(x,y) \rightarrow A''(y,x)$



10. i. A → A' Reflect over $y = 0$ (x-axis)
ii. $A'(x,y) \rightarrow A''(-x,-y)$



11. i. $A(x,y) \rightarrow A'(-y,-x)$
ii. $A'(x,y) \rightarrow A''(x+4,y)$



12. i. $A(x,y) \rightarrow A'(y,-x)$
ii. $A'(x,y) \rightarrow A''(x,-y)$