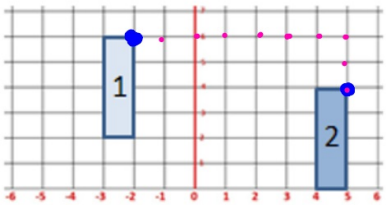
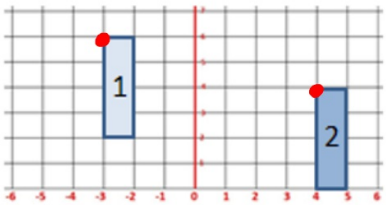
Mixed Transformations:

1. Write the rule to translate figure 1 to figure 2



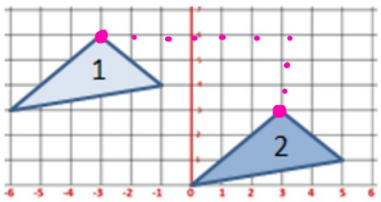
$(x,y) \rightarrow (x+7, y-2)$

2. Write the rule to translate figure 2 to figure 1



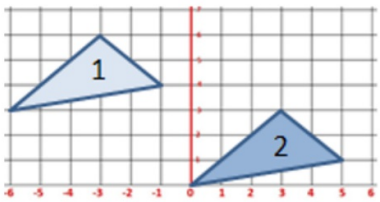
$(x,y) \rightarrow (x-7, y+2)$

3. Write the rule to translate the figure from figure 1 to figure 2.

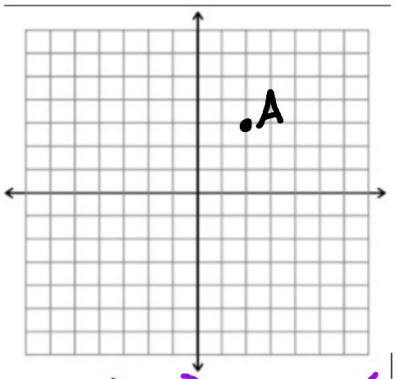


$(x,y) \rightarrow (x+6, y-3)$

4. Write the rule to translate the figure from figure 2 to figure 1.

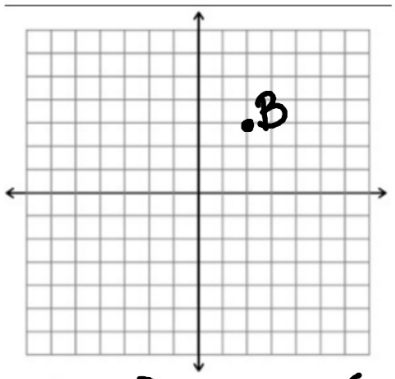


5. Plot the point A (2, 3), rotate 90° clockwise. What are the coordinates of the point? Plot the new point A'.



A(2,3) → A'(3,-2)

6. Plot the point B (2, 3), rotate 180° ~~clockwise.~~ What are the coordinates of the point? Plot the new point B'.



B(2,3) → B'(-2,-3)

7. Translate ΔALT if A(-5,-1), L(-3,-2), T(-3,2) by moving it right 6 and down 3, then reflect the Over the y-axis.

+6 -3

A(-5,-1) → A'(1,-4) → A''(-1,-4)

L(-3,-2) → L'(3,-5) → L''(-3,-5)

T(-3,2) → T'(3,-1) → T''(-3,-1)

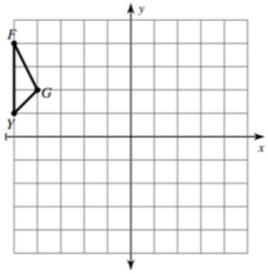
8. Reflect ΔTAB if T (2, 3), A (1, 1), and B (4,-3) over the x-axis, then reflect the image over the y-axis. What are the final coordinates of T?

T(2,3) → T'(2,-3) → T''(-2,-3)

A(1,1) → A'(1,-1) → A''(-1,-1)

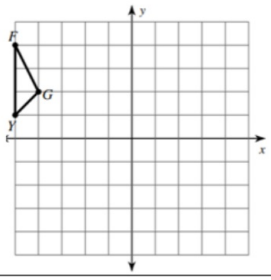
B(4,-3) → B'(4,3) → B''(-4,3)

9. Reflect over the x-axis. Label the new points F', G' and Y'



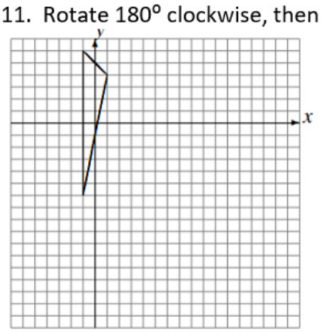
F(,)→F'(,)
G(,)→G'(,)
Y(,)→Y'(,)

10. Rotate of 180°. Label the new points F', G' and Y'



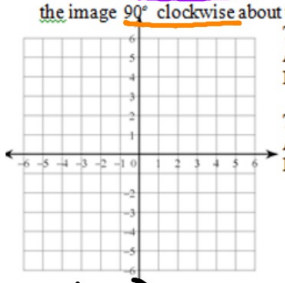
F(-5,4)→F'(5,-4)
G(-4,2)→G'(4,-2)
Y(-5,1)→Y'(5,-1)

11. Rotate 180° clockwise, then reflect over the x-axis.



12.

d)Reflect Δ TAB if T(2,3), A(1,1), and B(4,-3) over the x-axis, then rotate the image 90° clockwise about the origin.

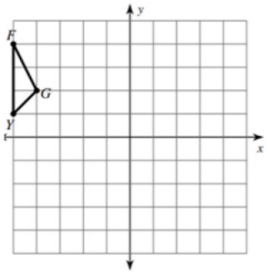


T'(2,-3)
A'(1,-1)
B'(4,-3)

T''(-3,-2)
A''(-1,-1)
B''(3,-4)

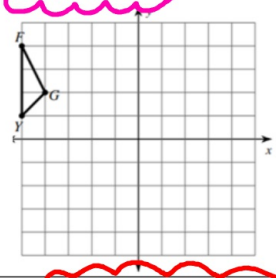
T(2,3)
A(1,1)
B(4,-3)

13. Reflect over y-axis. Label the new points F', G' and Y'



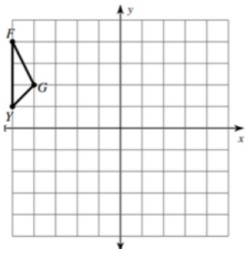
F(,)→F'(,)
G(,)→G'(,)
Y(,)→Y'(,)

14. Translate (x, y)→(x+6, y-2). Label the new points F', G' and Y'



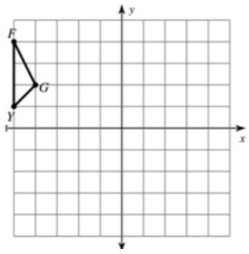
F(-5,4)→F'(1, 2)
G(-4,2)→G'(2, 0)
Y(-5, 1)→Y'(1,-1)

15. Rotate of 90° clockwise. Label the new points F', G' and Y'



F(-5,4)→F'(4,+5)
G(-4,2)→G'2,+4)
Y(-5,1)→Y'(1,+5

16. Rotate of 90° counterclockwise. Label the new points F', G' and Y'



F(-5,4)→F'(-4,-5
G(-4,2)→G'(-2,-4
Y(-5,1)→Y'(-1,-5