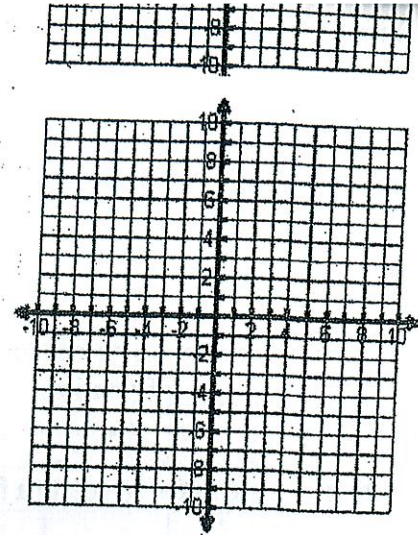


Examples: Rotate 180° counterclockwise about the origin.

$$A(-7, 3) \longrightarrow A'(\quad, \quad)$$

$$B(1, 4) \longrightarrow B'(\quad, \quad)$$

$$C(3, 1) \longrightarrow C'(\quad, \quad)$$

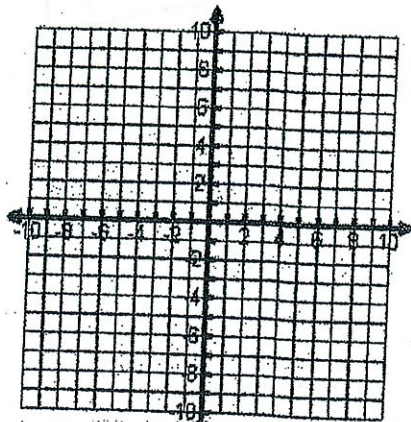


Examples: Rotate 270° counterclockwise about the origin.

$$A(-7, 3) \longrightarrow A'(\quad, \quad)$$

$$B(1, 4) \longrightarrow B'(\quad, \quad)$$

$$C(3, 1) \longrightarrow C'(\quad, \quad)$$

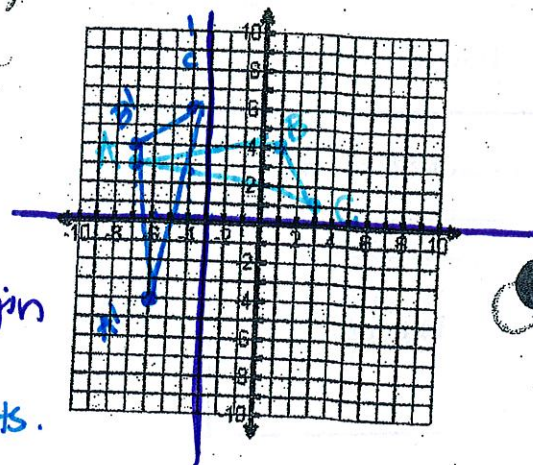


Examples: Rotate 90° counterclockwise about $(-3, 0)$.

$$A(-7, 3) \longrightarrow A'(-6, -4)$$

$$B(1, 4) \longrightarrow B'(-7, 4)$$

$$C(3, 1) \longrightarrow C'(-4, 6)$$



1. plot pts and create a new origin

2. Re Name my pts based on my new origin

A $(-4, 3)$ B $(4, 4)$ C $(6, 1)$

3. Perform the transformation on my new pts.

A' $(-3, -4)$ B' $(-4, 4)$ C' $(-1, 6)$

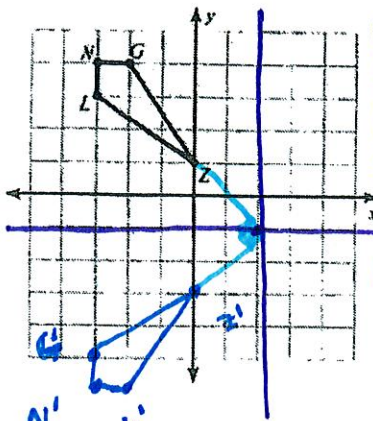
4. plot those on your new origin

5. convert pts back to being central @ $(0, 0)$

Rotation HW#3

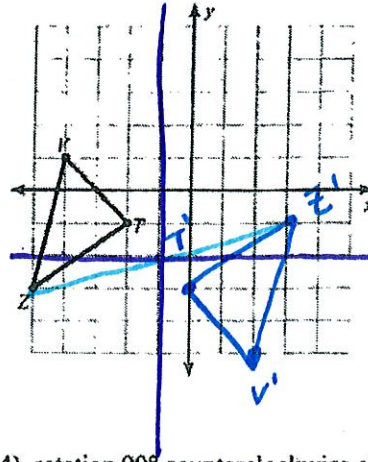
Graph the image of the figure using the transformation given.

1) rotation 90° counterclockwise about $(2, -1)$.



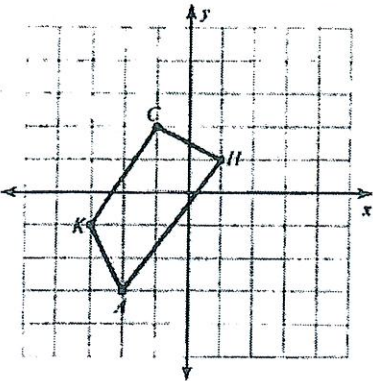
- ①
- N (-5, 5)
- G (-4, 5)
- L (-5, 4)
- Z (-2, 2)
- ②
- N' (-5, -5)
- G' (-5, -4)
- L' (-4, -5)
- Z' (-2, -2)

2) rotation 180° about $(-1, -2)$.

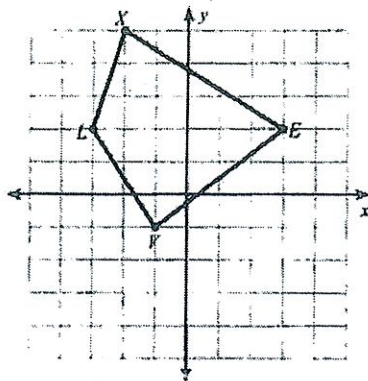


- V (-3, 3)
- T (-1, 1)
- Z' (-4, -1)
- V' (3, -3) (2, -5)
- T' (1, -1) (0, -3)
- Z' (4, 1) (3, 1)

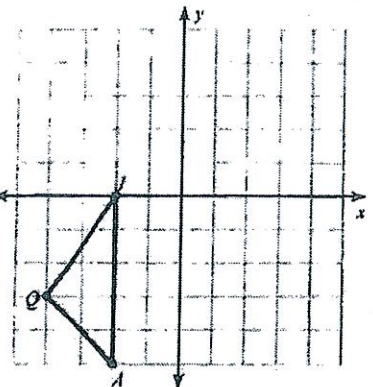
3) rotation 180° about $(2, 1)$.



4) rotation 90° counterclockwise about $(1, -2)$.



5) rotation 180° about $(-1, -2)$.



6) rotation 180° about $(3, 1)$.

