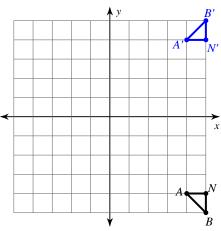
Date_____ Period____

TRANSFORMATIONS

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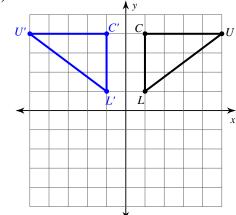
Write a rule to describe each transformation.

1)

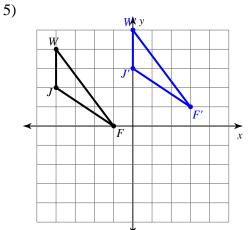


reflection across the x-axis

3)

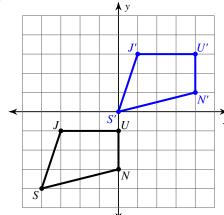


reflection across the y-axis



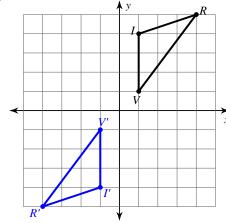
translation: 4 units right and 1 unit up

2)



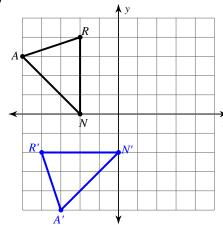
translation: 4 units right and 4 units up

4)



rotation 180° about the origin

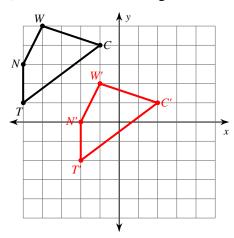
6)



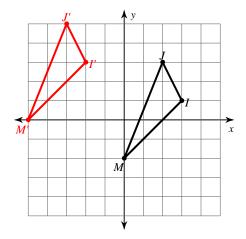
rotation 90° counterclockwise about the origin

Translate the figure as indicated. Label the image using prime notation.

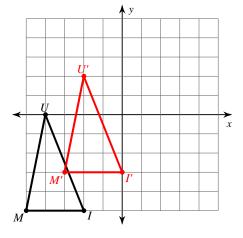
7) translation: 3 units right and 3 units down



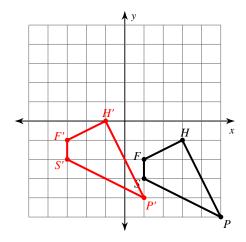
9) translation: 5 units left and 2 units up



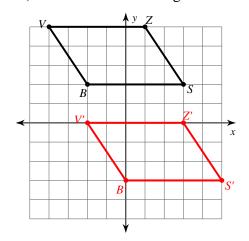
11) translation: 2 units right and 2 units up



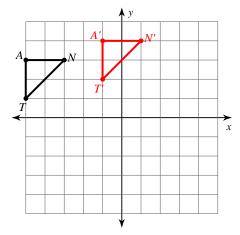
8) translation: 4 units left and 1 unit up



10) translation: 2 units right and 5 units down

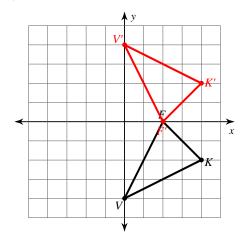


12) translation: 4 units right and 1 unit up

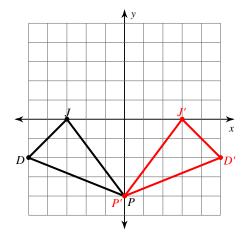


Reflect the figure as indicated. Label the image using prime notation.

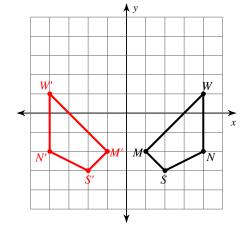
13) reflection across the x-axis



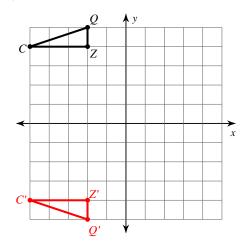
15) reflection across the y-axis



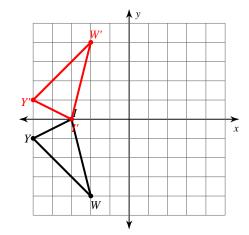
17) reflection across the y-axis



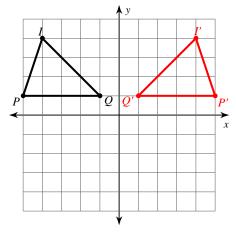
14) reflection across the x-axis



16) reflection across the x-axis

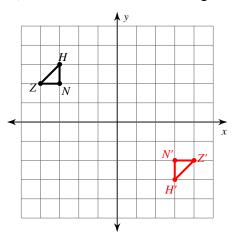


18) reflection across the y-axis

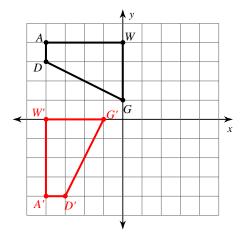


Rotate the figure as indicated. Label the image using prime notation.

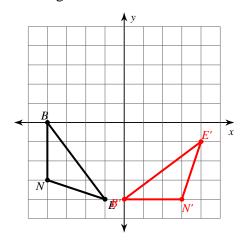
19) rotation 180° about the origin



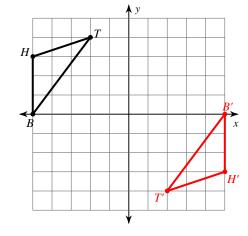
20) rotation 90° counterclockwise about the origin



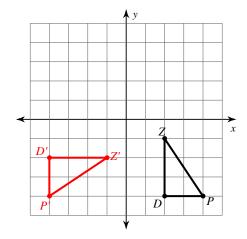
21) rotation 90° counterclockwise about the origin



22) rotation 180° about the origin



23) rotation 90° clockwise about the origin



24) rotation 180° about the origin

