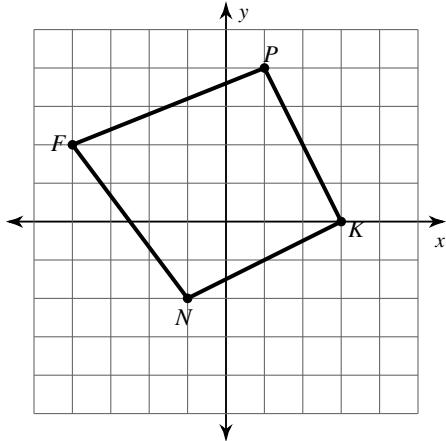
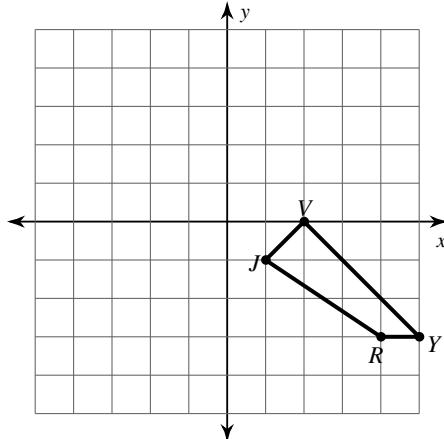


**Rotations****Graph the image of the figure using the transformation given.**

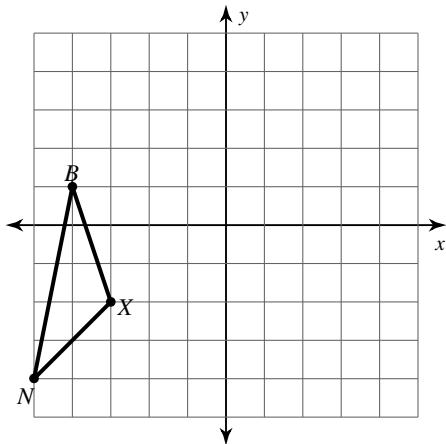
- 1) rotation
- $180^\circ$
- about the origin



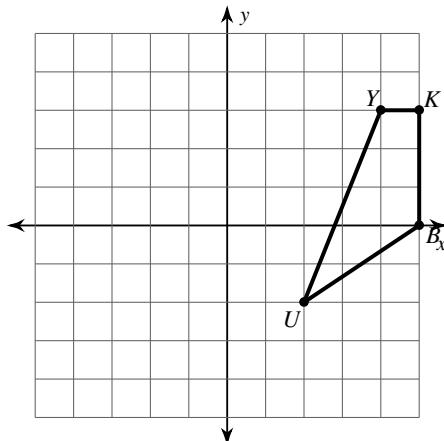
- 2) rotation
- $180^\circ$
- about the origin



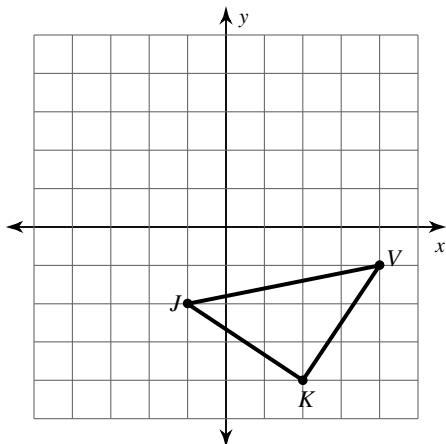
- 3) rotation
- $90^\circ$
- counterclockwise about the origin



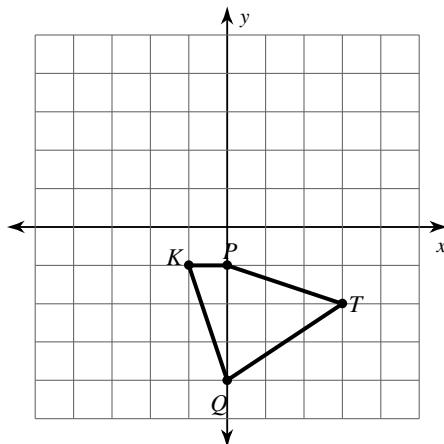
- 4) rotation
- $90^\circ$
- clockwise about the origin



- 5) rotation
- $90^\circ$
- clockwise about the origin

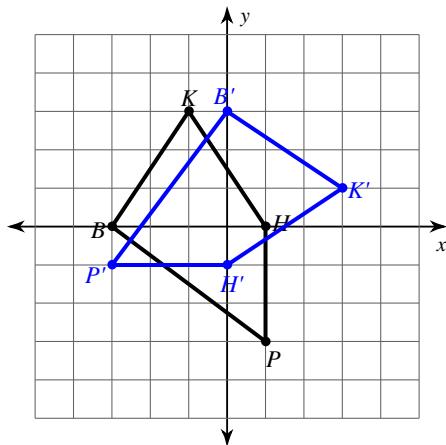


- 6) rotation
- $180^\circ$
- about the origin

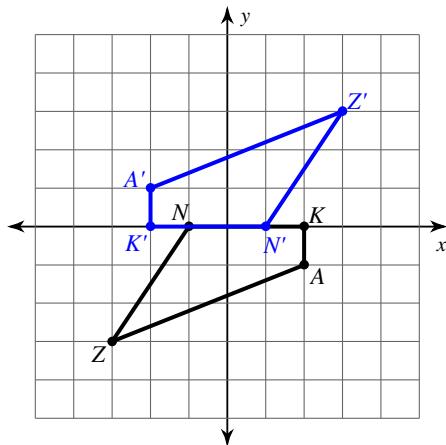


**Write a rule to describe each transformation.**

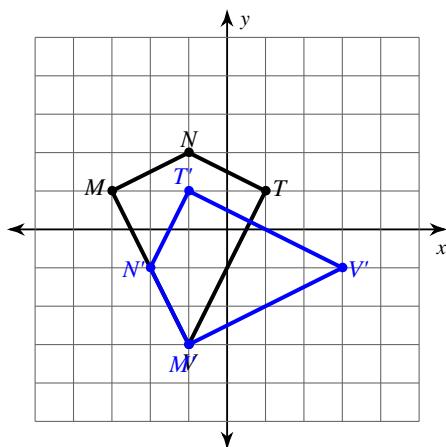
7)



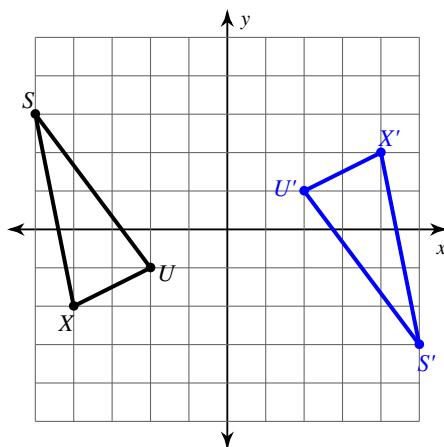
8)



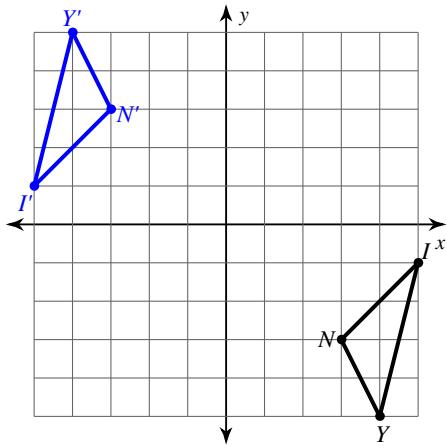
9)



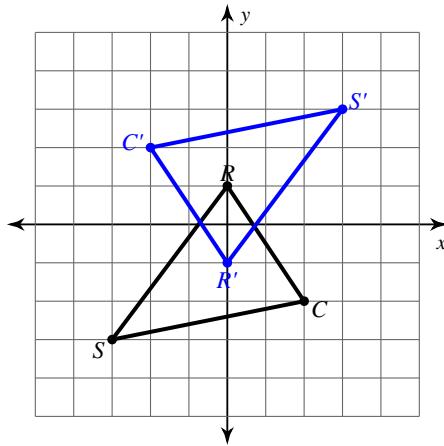
10)



11)

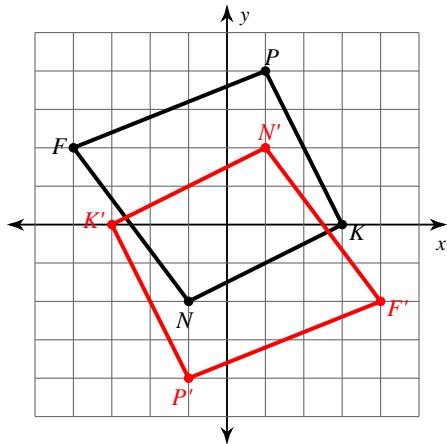


12)

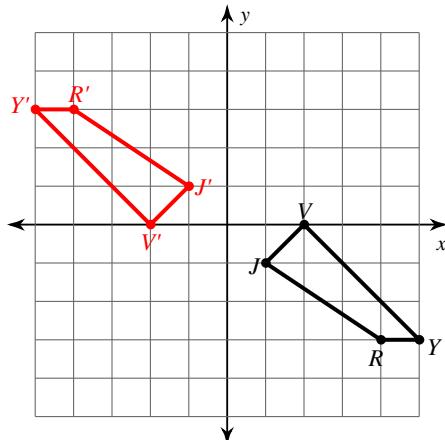


**Rotations****Graph the image of the figure using the transformation given.**

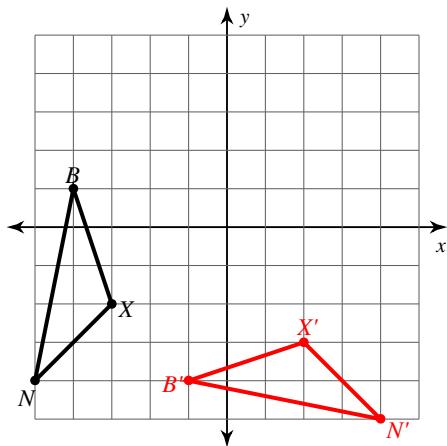
- 1) rotation
- $180^\circ$
- about the origin



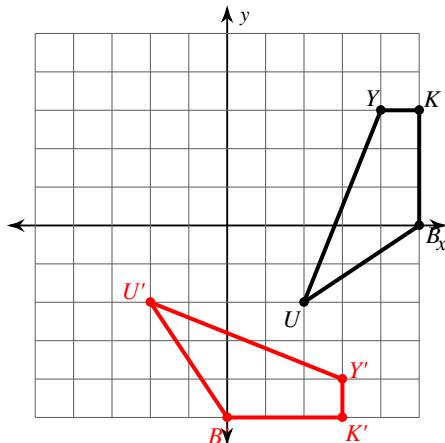
- 2) rotation
- $180^\circ$
- about the origin



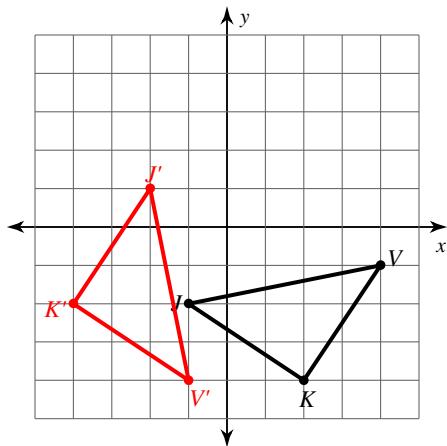
- 3) rotation
- $90^\circ$
- counterclockwise about the origin



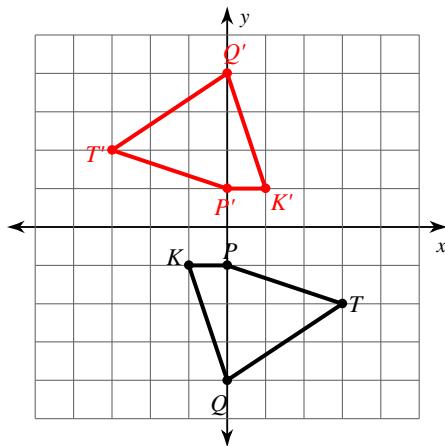
- 4) rotation
- $90^\circ$
- clockwise about the origin



- 5) rotation
- $90^\circ$
- clockwise about the origin

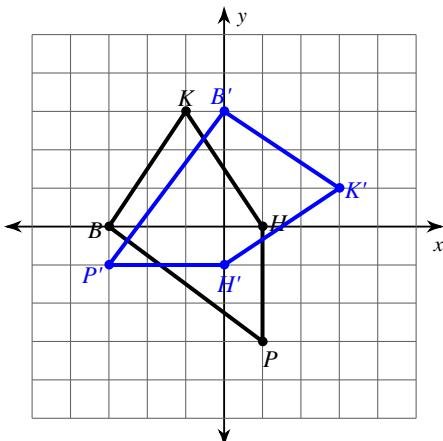


- 6) rotation
- $180^\circ$
- about the origin

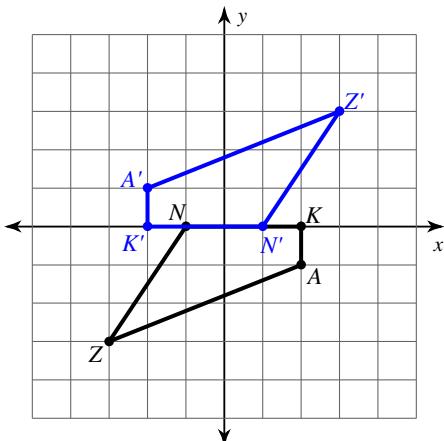


**Write a rule to describe each transformation.**

7)



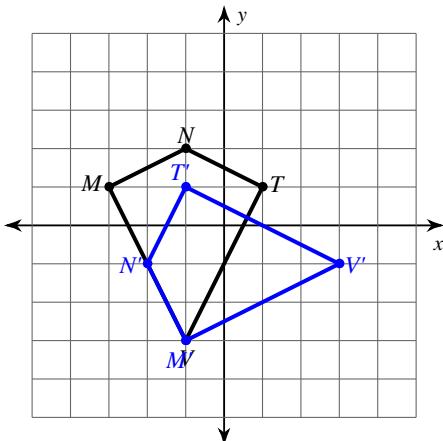
8)



rotation 90° clockwise about the origin

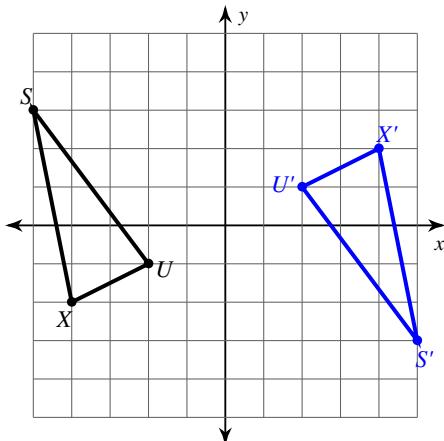
rotation 180° about the origin

9)



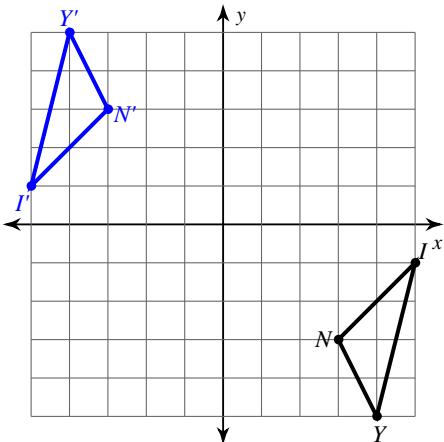
rotation 90° counterclockwise about the origin

10)



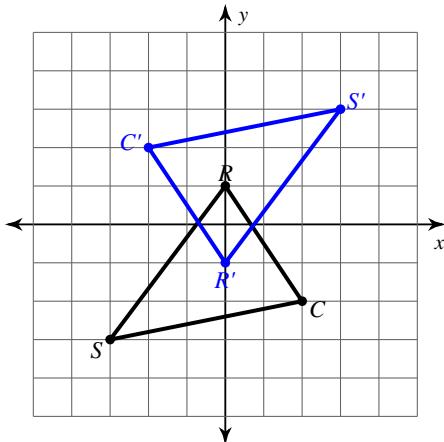
rotation 180° about the origin

11)



rotation 180° about the origin

12)



rotation 180° about the origin