

Sequence of Transformations

Name _____

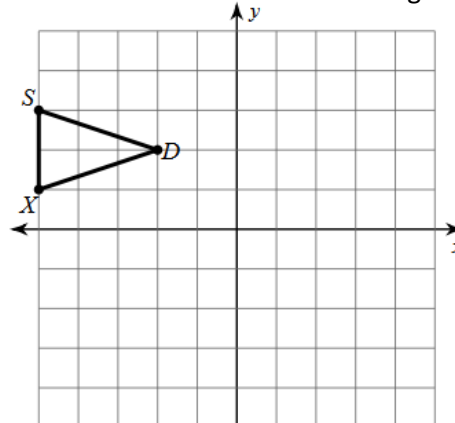
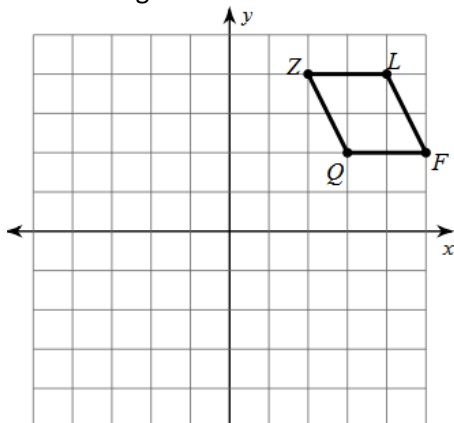
Graph the image of the figure using the sequence of transformations given. Then write the coordinate notation.

1) Reflect across the y-axis.

2) Translate right 3 and up 1.

Translate it 2 right and 4 down.

Rotate 90° CCW about the origin.



Coordinate Notation:

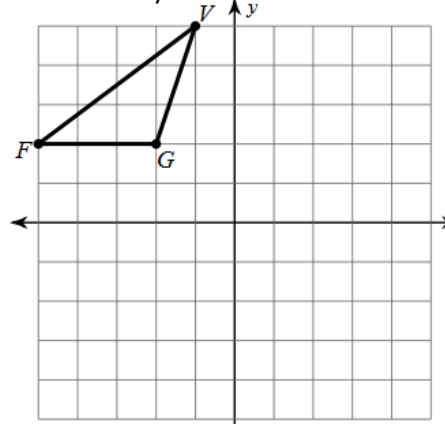
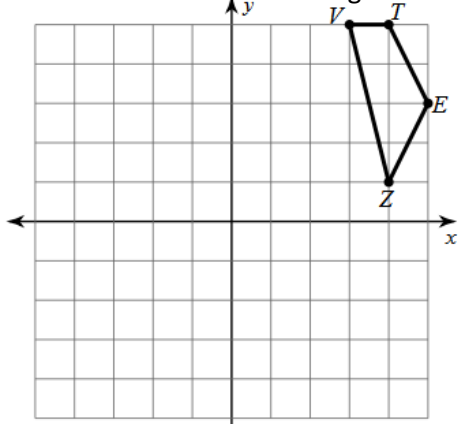
Coordinate Notation:

3) Reflect across the x-axis.

4) Rotate 90° CW about the origin.

Rotate 270° CCW about the origin.

Reflect over $y=-x$



Coordinate Notation:

Coordinate Notation:

5) Rotate 180° about the origin.

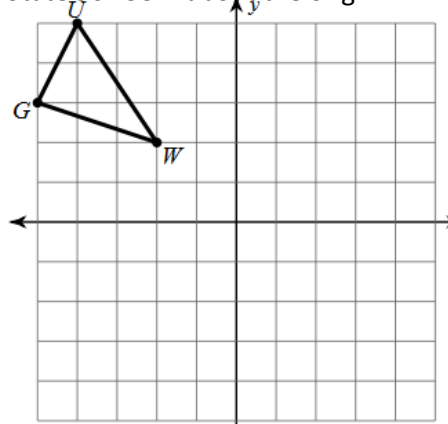
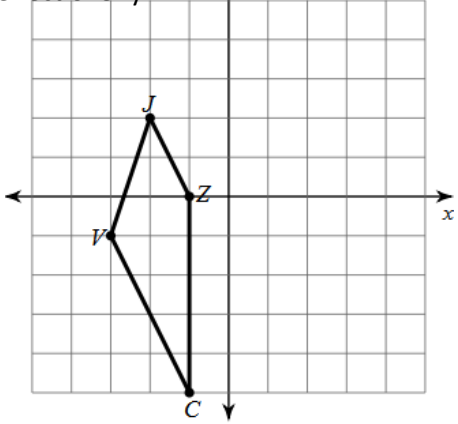
6) Reflect across $y=x$.

Translate $(x,y) \rightarrow (x-6, y-2)$.

Translate left 4 and up 2.

Reflect over $y=x$.

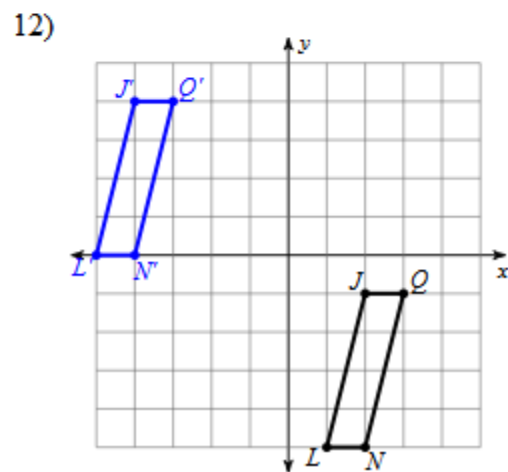
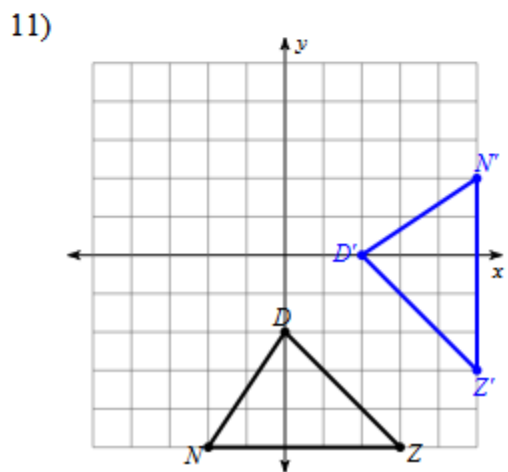
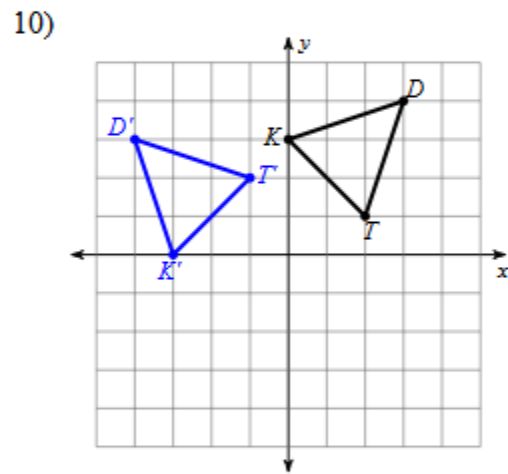
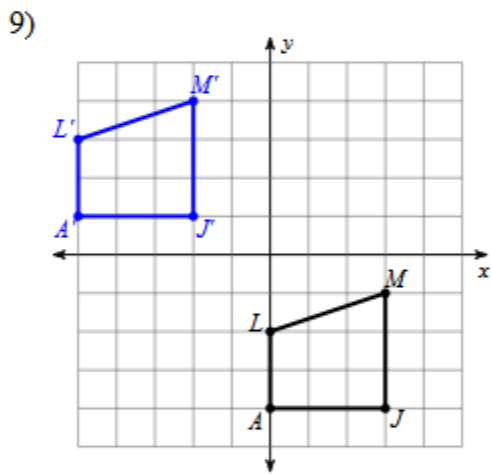
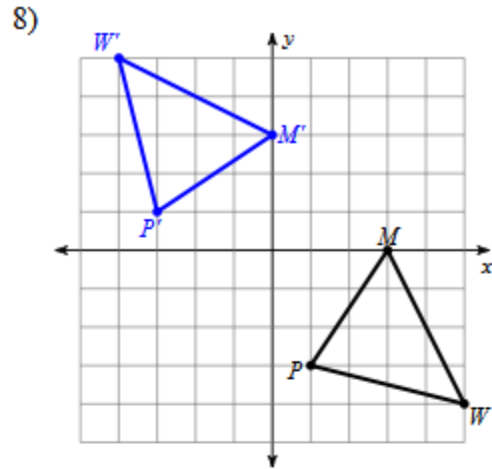
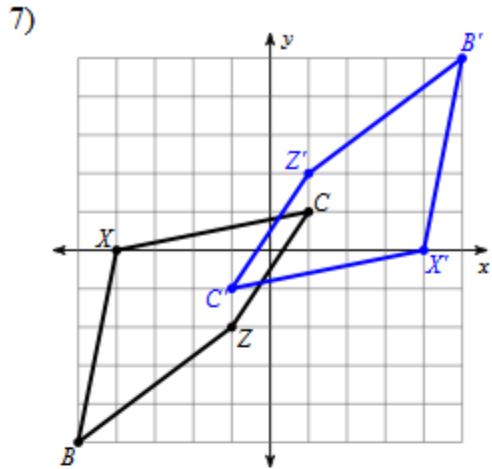
Rotate 90° CCW about the origin.



Coordinate Notation:

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Identify the transformation shown. For a challenge, also find a sequence of transformations for 7, 8, 10, 11.



13. How can you use the generic coordinates of single transformations to create the same image after a sequence of transformations?