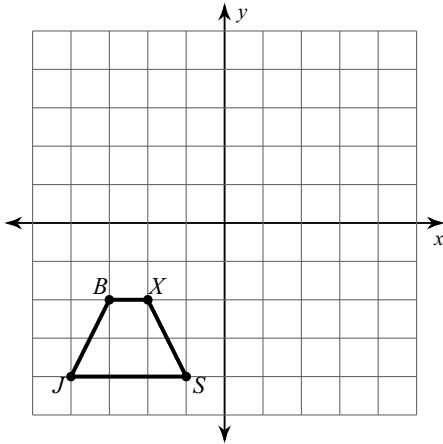
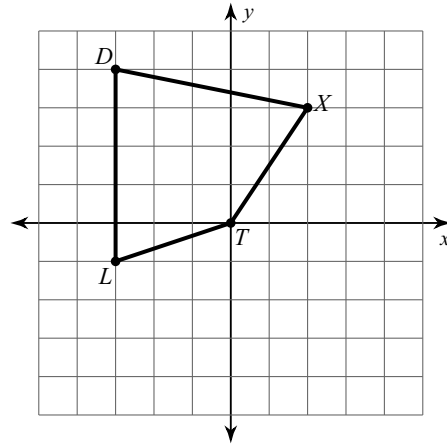


Graph the image of the figure using the transformation given.

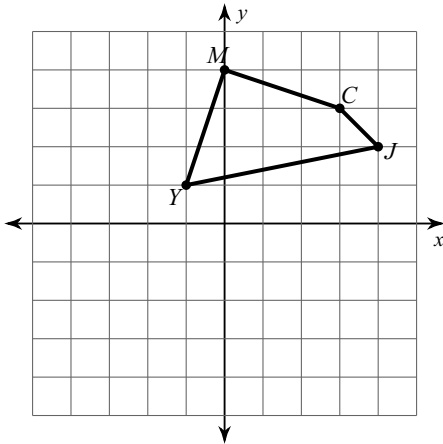
1) reflection across $y = -1$



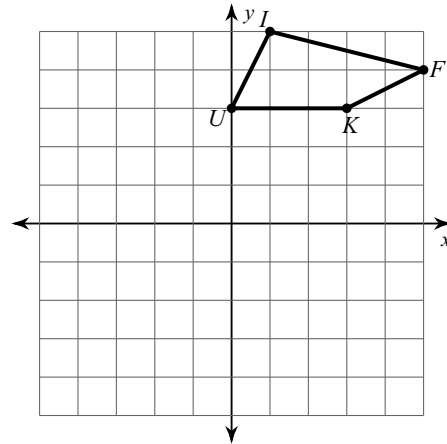
2) reflection across $x = 1$



3) reflection across the y-axis

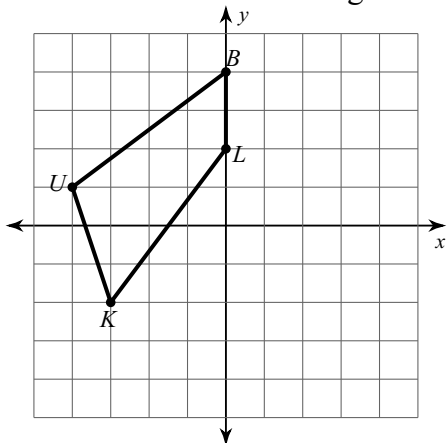


4) reflection across the y-axis

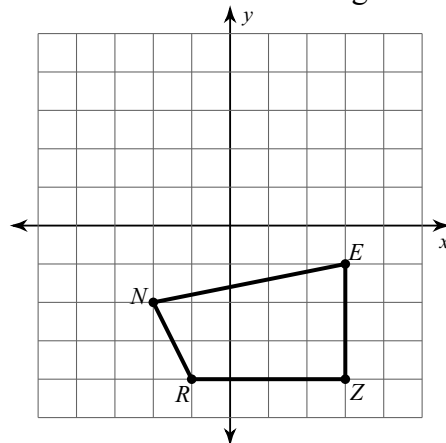


Find the coordinates of the vertices of each figure after the given transformation.

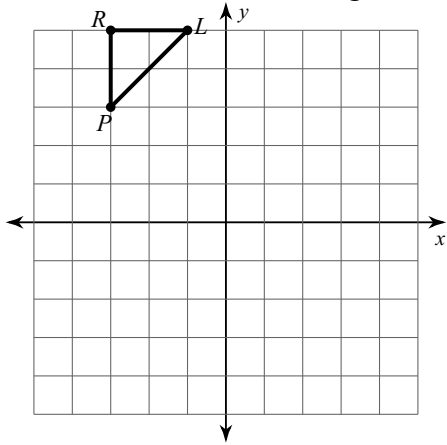
5) rotation 180° about the origin



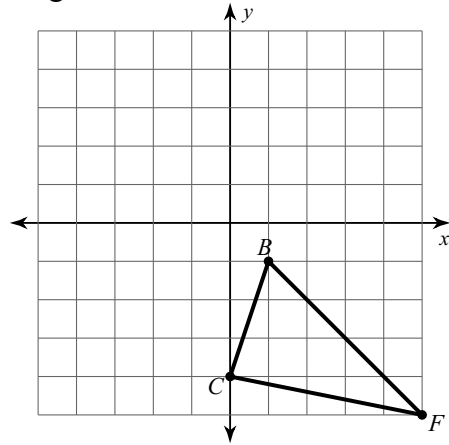
6) rotation 180° about the origin



7) rotation 180° about the origin

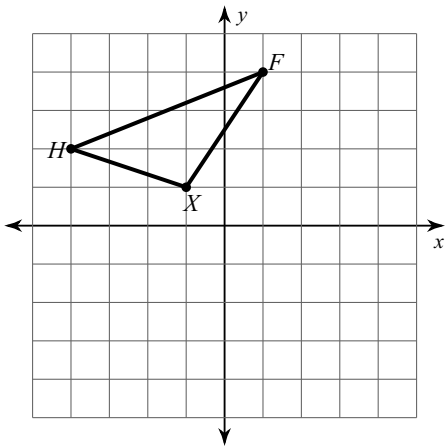


8) rotation 90° counterclockwise about the origin

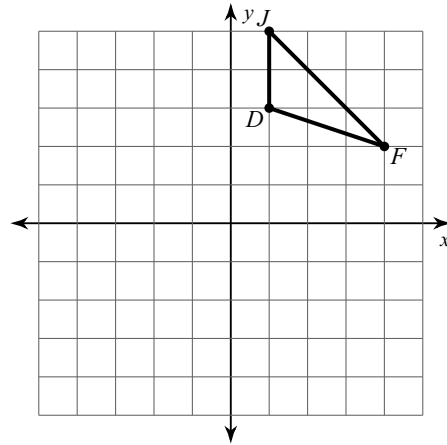


Graph the image of the figure using the transformation given.

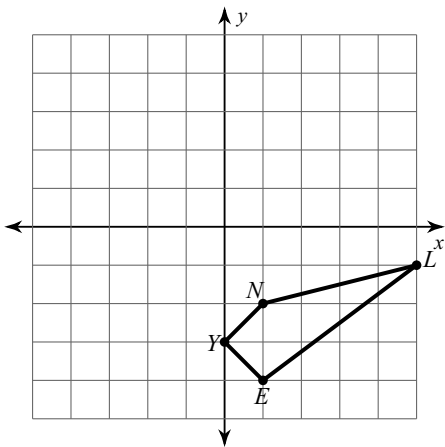
9) rotation 180° about the origin



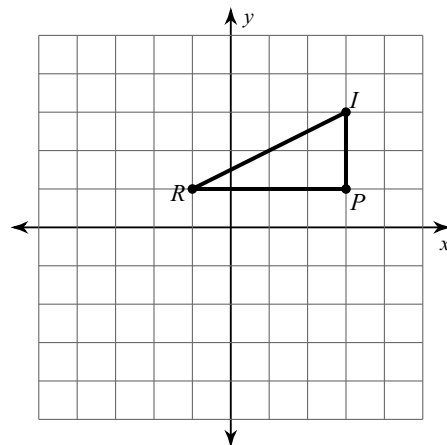
10) rotation 90° counterclockwise about the origin



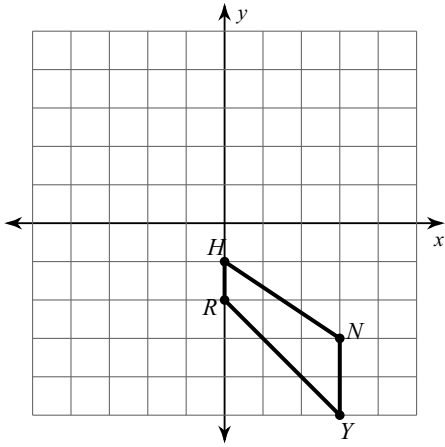
11) rotation 180° about the origin



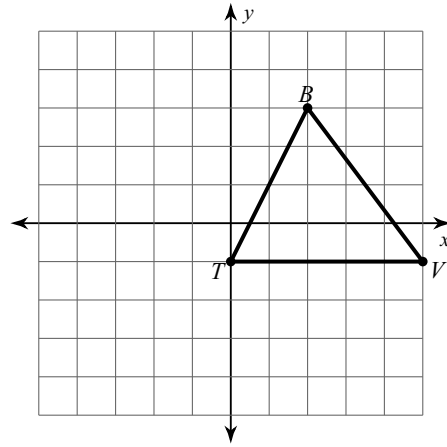
12) rotation 90° counterclockwise about the origin



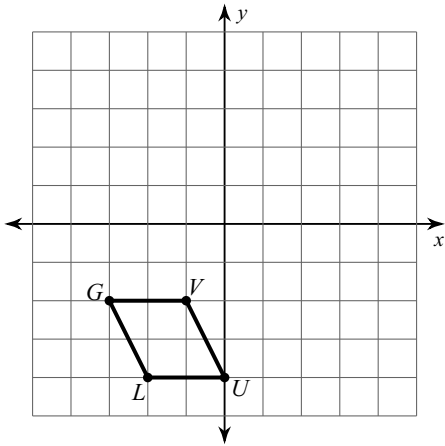
13) translation: $(x, y) \rightarrow (x - 1, y + 3)$



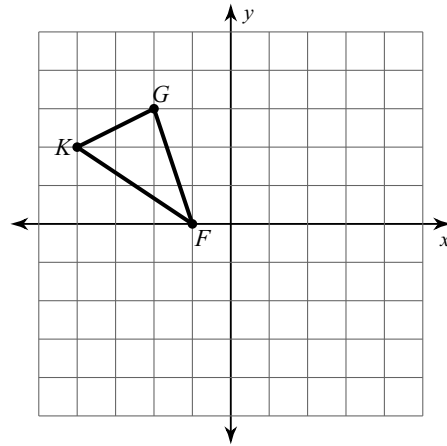
14) translation: $(x, y) \rightarrow (x - 4, y - 1)$



15) translation: $(x, y) \rightarrow (x, y + 1)$

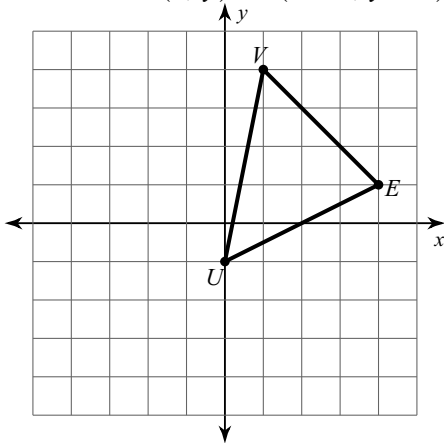


16) translation: $(x, y) \rightarrow (x + 3, y - 5)$

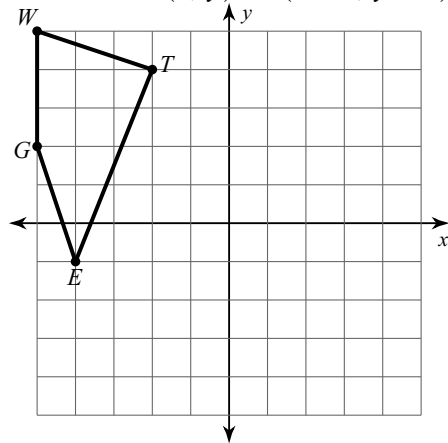


Find the coordinates of the vertices of each figure after the given transformation.

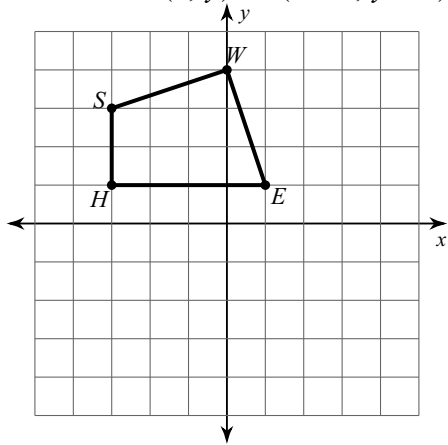
17) translation: $(x, y) \rightarrow (x + 1, y - 3)$



18) translation: $(x, y) \rightarrow (x + 7, y - 3)$



19) translation: $(x, y) \rightarrow (x + 4, y - 3)$



20) translation: $(x, y) \rightarrow (x - 1, y + 2)$

