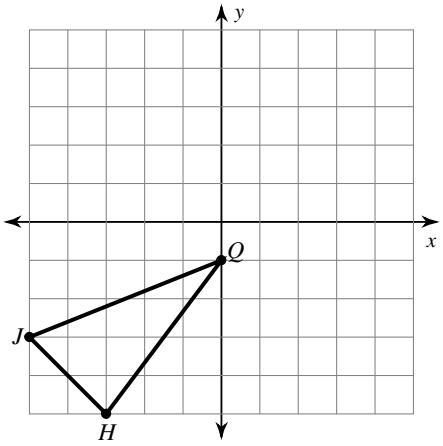
Candle Center - Infinite Pre-Algebra Name_____

Rotations of Shapes

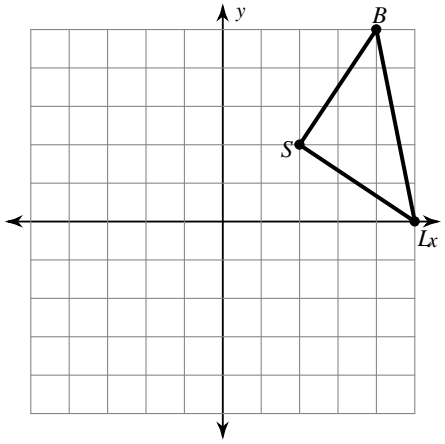
Date_____ Period____

Graph the image of the figure using the transformation given.

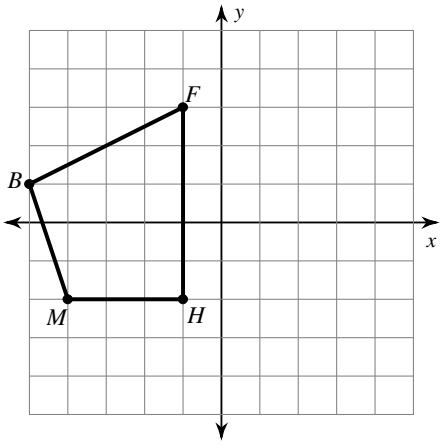
1) rotation 180° about the origin



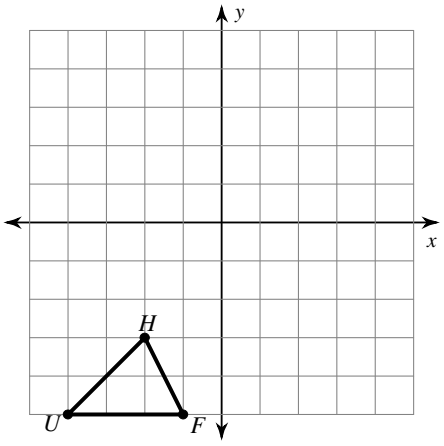
2) rotation 90° counterclockwise about the origin



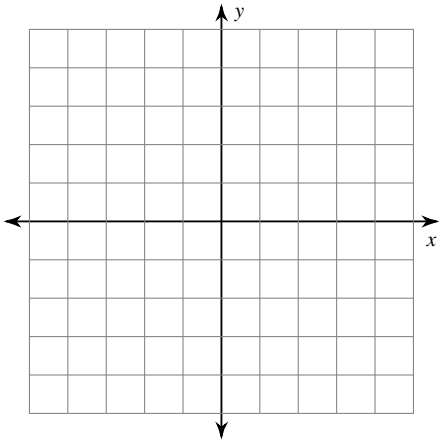
3) rotation 90° clockwise about the origin



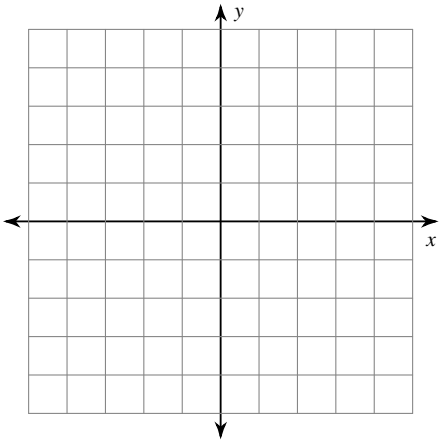
4) rotation 180° about the origin



5) rotation 90° clockwise about the origin
$U(1, -2)$, $W(0, 2)$, $K(3, 2)$, $G(3, -3)$



6) rotation 180° about the origin
$V(2, 0)$, $S(1, 3)$, $G(5, 0)$



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

7) rotation 180° about the origin
$Z(-1, -5)$, $K(-1, 0)$, $C(1, 1)$, $N(3, -2)$

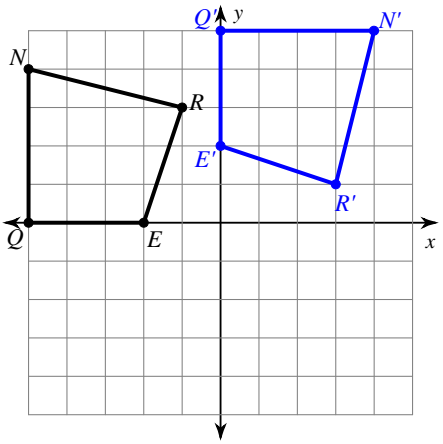
8) rotation 180° about the origin
$L(1, 3)$, $Z(5, 5)$, $F(4, 2)$

9) rotation 90° clockwise about the origin
$S(1, -4)$, $W(1, 0)$, $J(3, -4)$

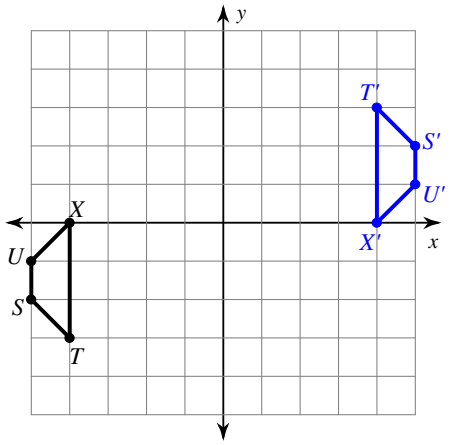
10) rotation 180° about the origin
$V(-5, -3)$, $A(-3, 1)$, $G(0, -3)$

Write a rule to describe each transformation.

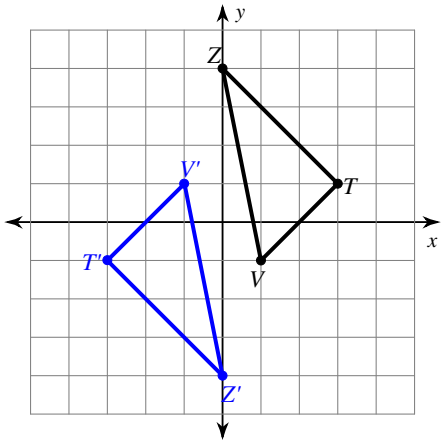
11)



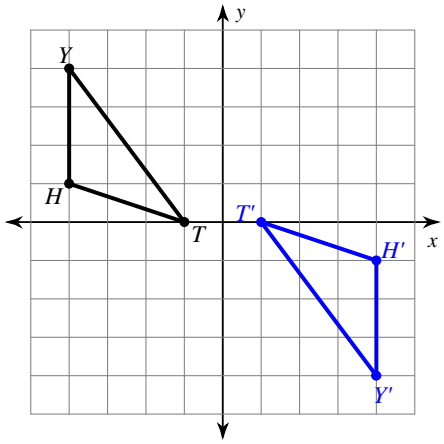
12)



13)



14)



Candle Center - Infinite Pre-Algebra

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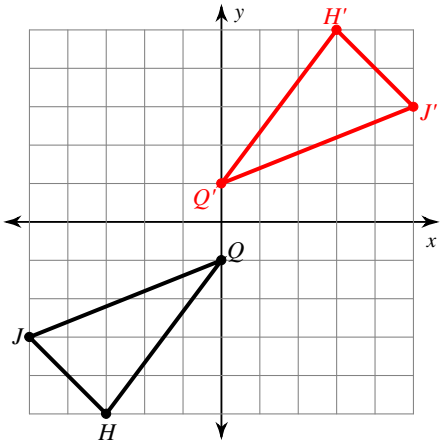
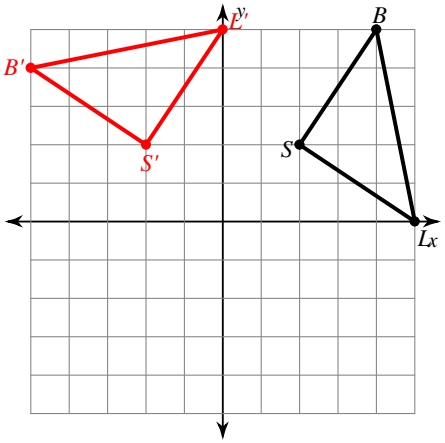
Graph the image of the figure using the transformation given.

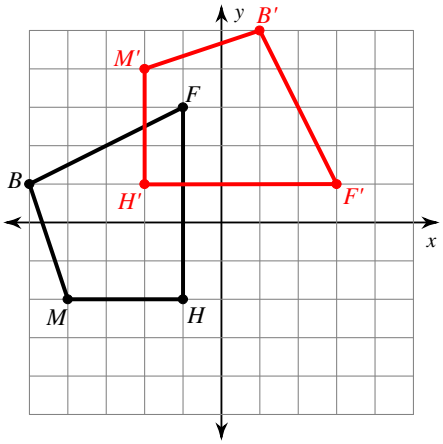
1) rotation 180° about the origin



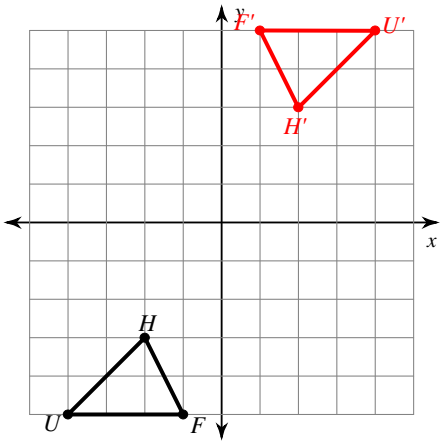
2) rotation 90° counterclockwise about the origin



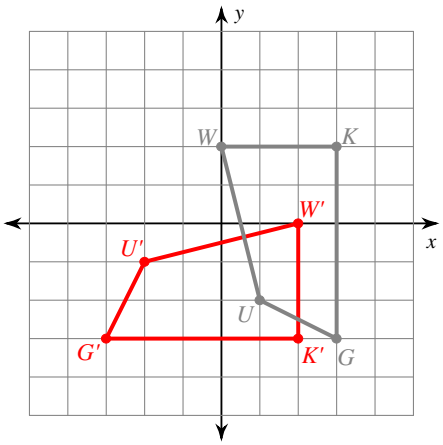
3) rotation 90° clockwise about the origin



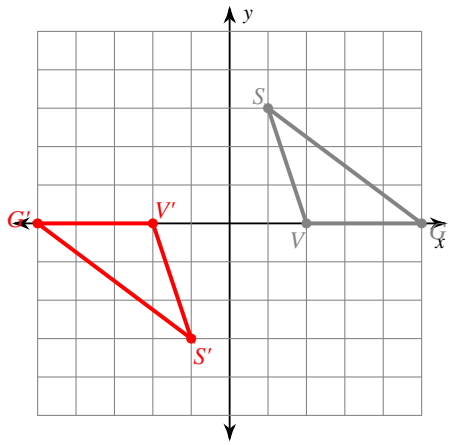
4) rotation 180° about the origin



5) rotation 90° clockwise about the origin
$U(1, -2)$, $W(0, 2)$, $K(3, 2)$, $G(3, -3)$



6) rotation 180° about the origin
$V(2, 0)$, $S(1, 3)$, $G(5, 0)$



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

7) rotation 180° about the origin
$Z(-1, -5)$, $K(-1, 0)$, $C(1, 1)$, $N(3, -2)$
$Z'(1, 5)$, $K'(1, 0)$, $C'(-1, -1)$, $N'(-3, 2)$

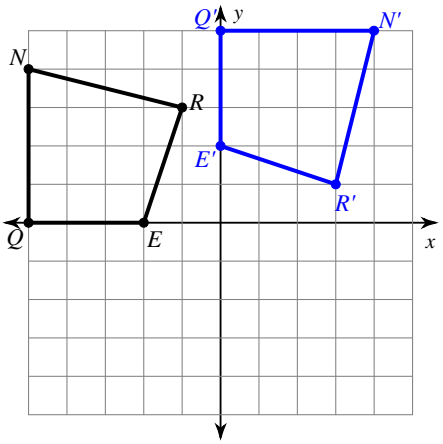
8) rotation 180° about the origin
$L(1, 3)$, $Z(5, 5)$, $F(4, 2)$
$L'(-1, -3)$, $Z'(-5, -5)$, $F'(-4, -2)$

9) rotation 90° clockwise about the origin
$S(1, -4)$, $W(1, 0)$, $J(3, -4)$
$S'(-4, -1)$, $W'(0, -1)$, $J'(-4, -3)$

10) rotation 180° about the origin
$V(-5, -3)$, $A(-3, 1)$, $G(0, -3)$
$V'(5, 3)$, $A'(3, -1)$, $G'(0, 3)$

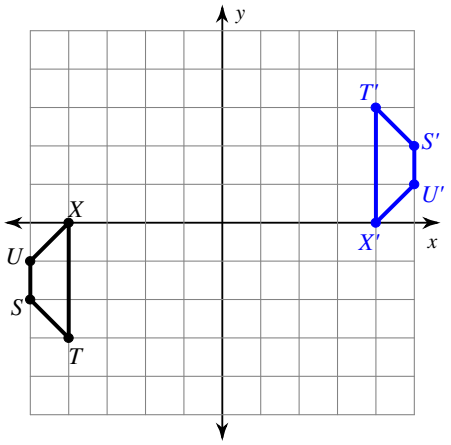
Write a rule to describe each transformation.

11)



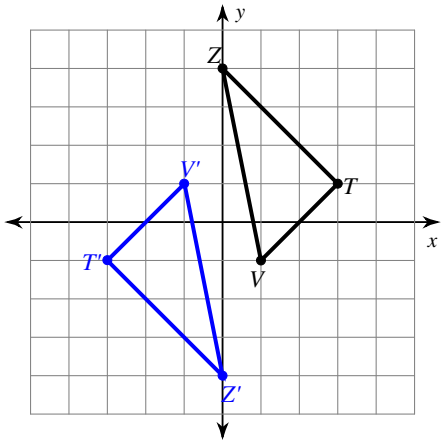
rotation 90° clockwise about the origin

12)



rotation 180° about the origin

13)



rotation 180° about the origin

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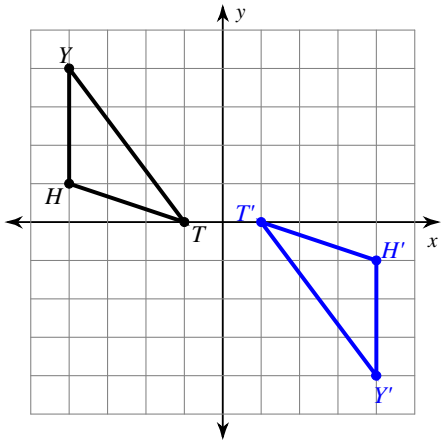

rotation 180° about the origin