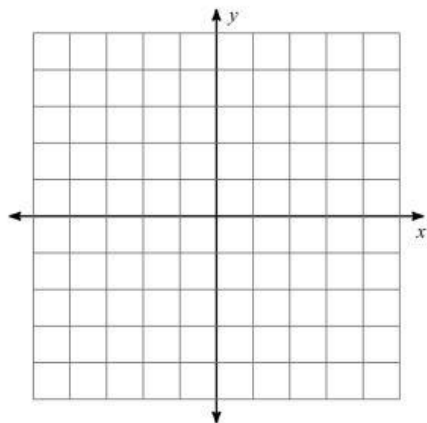


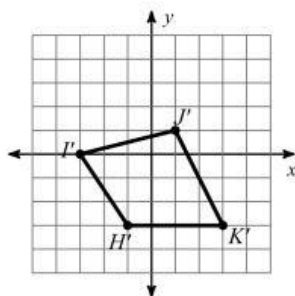
Worksheet 4.2 Geometric Transformation : Reflection

Graph the image of the figure using the transformation given. Then, write the coordinates of the new image.

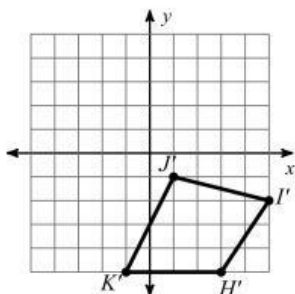
- 1) reflection across the x-axis
 $K(-3, -3), J(-1, 1), I(3, 0), H(1, -3)$



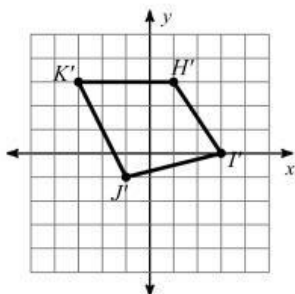
A)



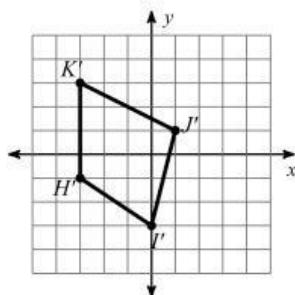
B)



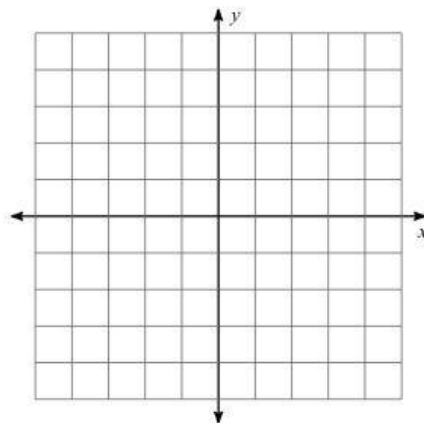
C)



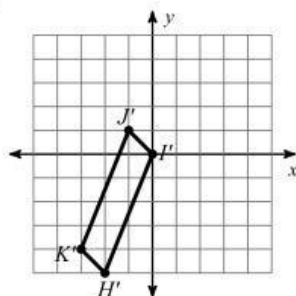
D)



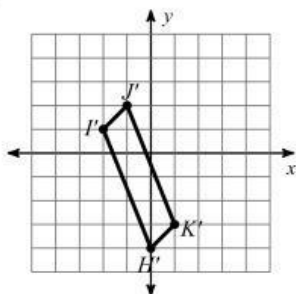
- 2) reflection across the y-axis
 $H(2, -5), I(0, 0), J(1, 1), K(3, -4)$



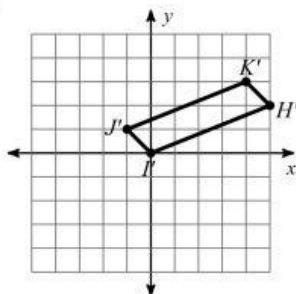
A)



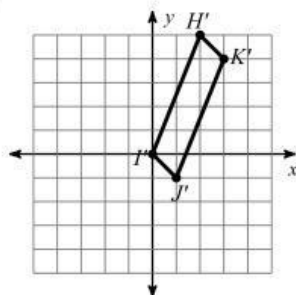
B)



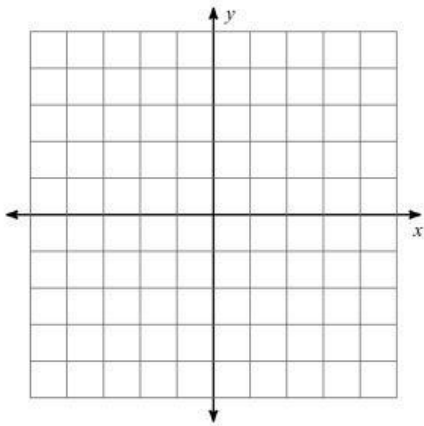
C)



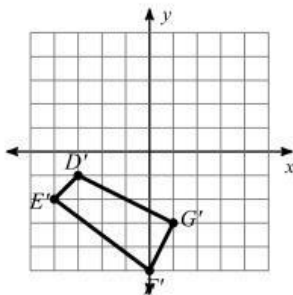
D)



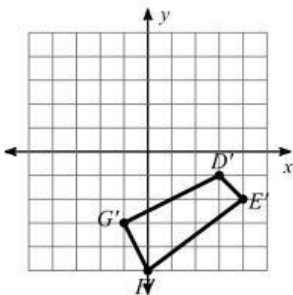
- 3) reflection across the x-axis
 $G(-1, 3)$, $F(0, 5)$, $E(4, 2)$, $D(3, 1)$



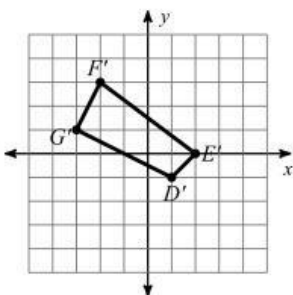
A)



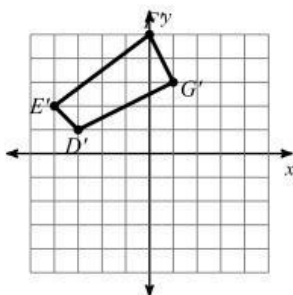
B)



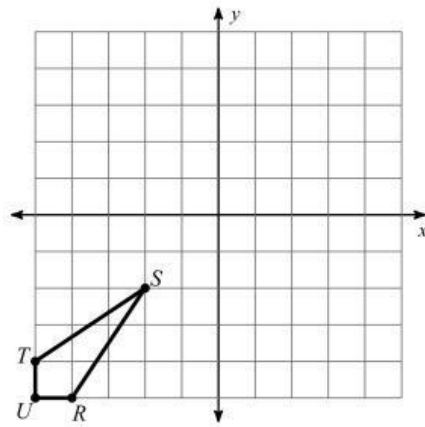
C)



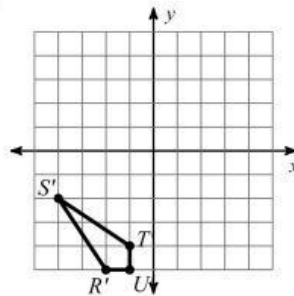
D)



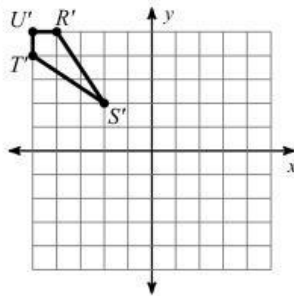
- 4) reflection across $y = -1$



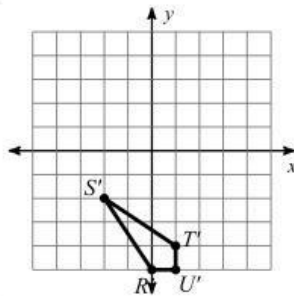
A)



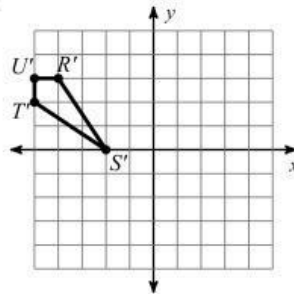
B)



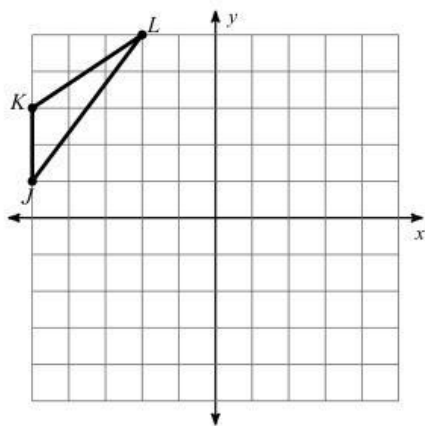
C)



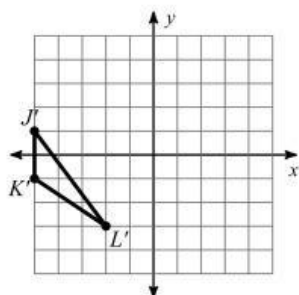
D)



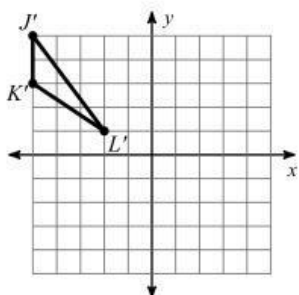
5) reflection across $y = 3$



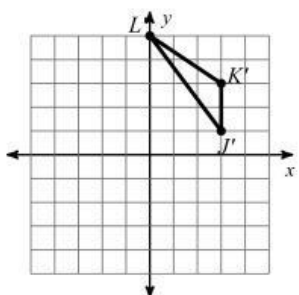
A)



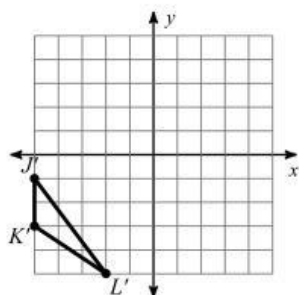
B)



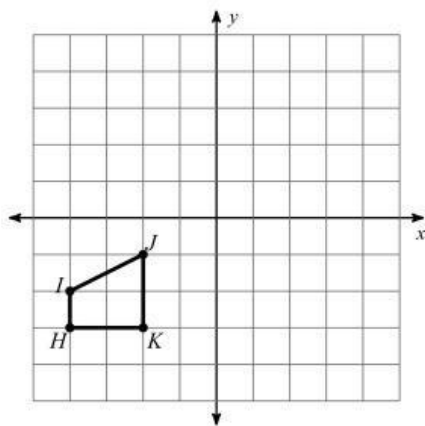
C)



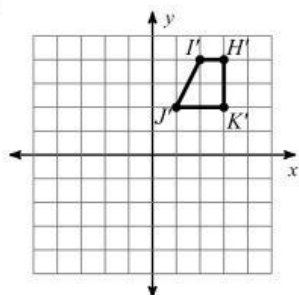
D)



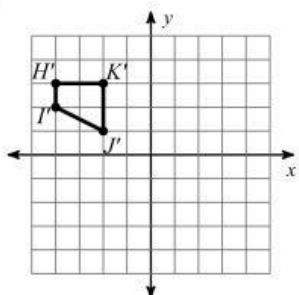
6) reflection across $y = -x$



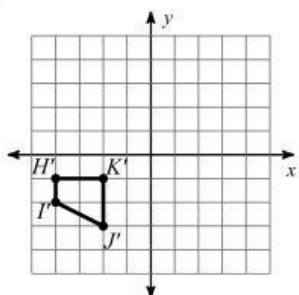
A)



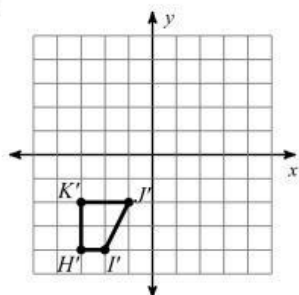
B)



C)



D)



Write a rule to describe each transformation.

7) $C(-4, 1), D(-3, 4), E(-3, 1)$
to
 $D'(-3, -2), E'(-3, 1), C'(-4, 1)$

8) $J(2, 0), K(-1, 4), L(1, 5), M(5, 3)$
to
 $K'(-1, -4), L'(1, -5), M'(5, -3), J'(2, 0)$