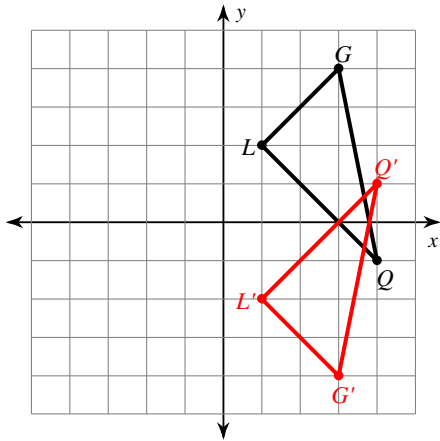


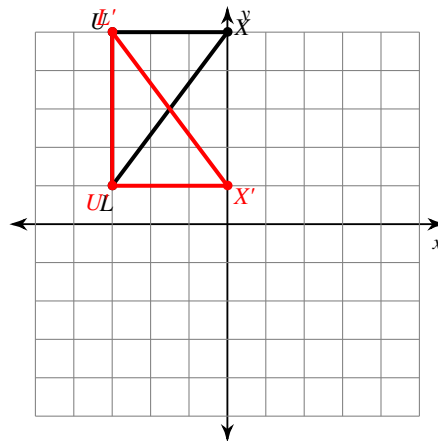
Reflections of Shapes

Graph the image of the figure using the transformation given.

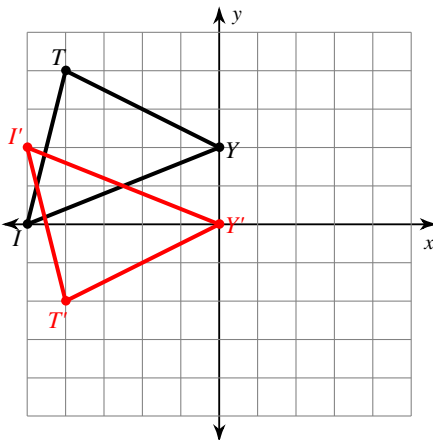
1) reflection across the x-axis



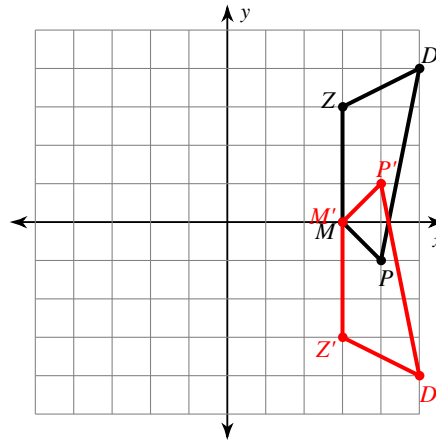
2) reflection across $y = 3$



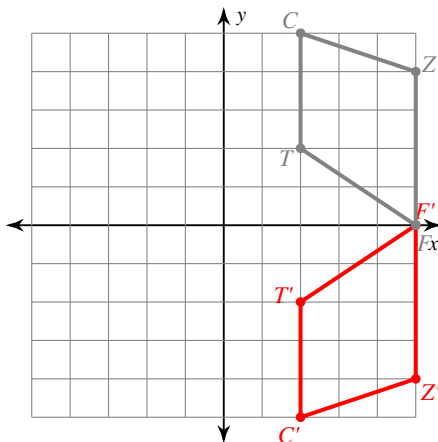
3) reflection across $y = 1$



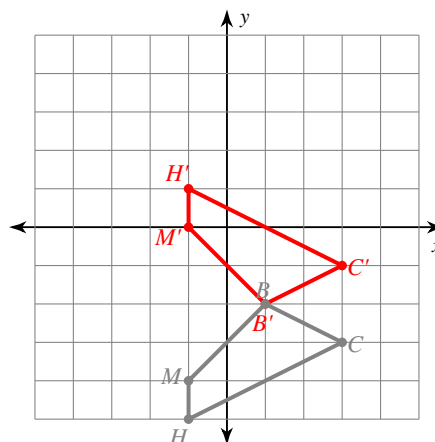
4) reflection across the x-axis



5) reflection across the x-axis
 $T(2, 2)$, $C(2, 5)$, $Z(5, 4)$, $F(5, 0)$



6) reflection across $y = -2$
 $H(-1, -5)$, $M(-1, -4)$, $B(1, -2)$, $C(3, -3)$



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

7) reflection across the x-axis

$K(1, -1), N(4, 0), Q(4, -4)$

$N'(4, 0), Q'(4, 4), K'(1, 1)$

8) reflection across $y = -1$

$R(-3, -5), N(-4, 0), V(-2, -1), E(0, -4)$

$N'(-4, -2), V'(-2, -1), E'(0, 2), R'(-3, 3)$

9) reflection across $x = 3$

$F(2, 2), W(2, 5), K(3, 2)$

$W'(4, 5), K'(3, 2), F'(4, 2)$

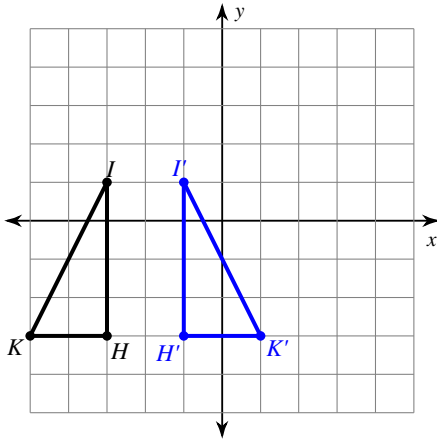
10) reflection across $x = -1$

$V(-3, -1), Z(-3, 2), G(-1, 3), M(1, 1)$

$Z'(1, 2), G'(-1, 3), M'(-3, 1), V'(1, -1)$

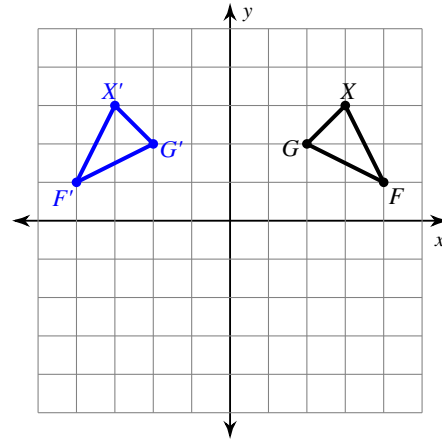
Write a rule to describe each transformation.

11)



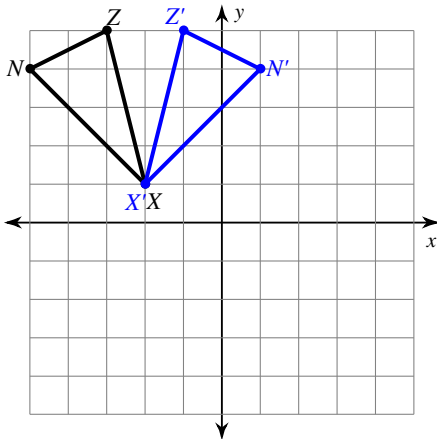
reflection across $x = -2$

12)



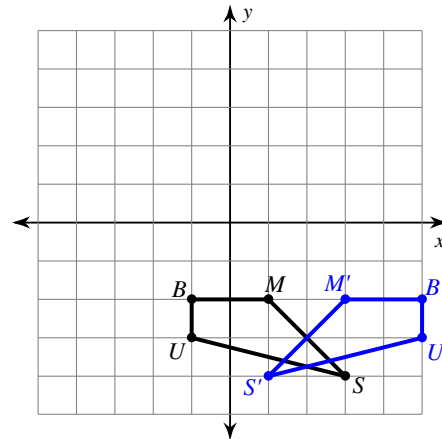
reflection across the y-axis

13)



reflection across $x = -2$

14)



reflection across $x = 2$