

Transformations – Reflections

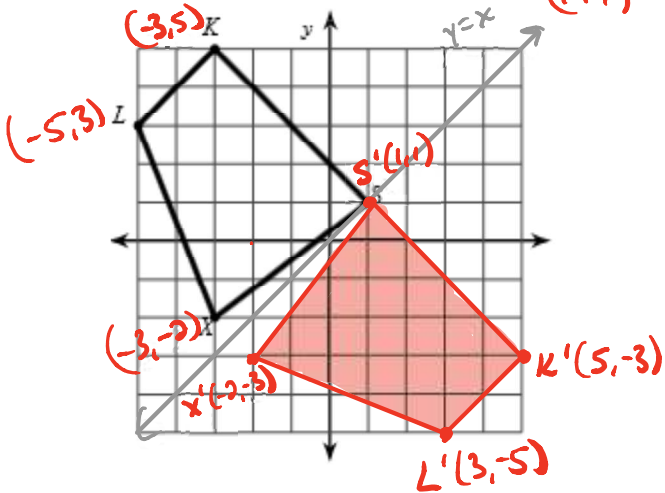
G.CO.A.5

Hw Section 20.2

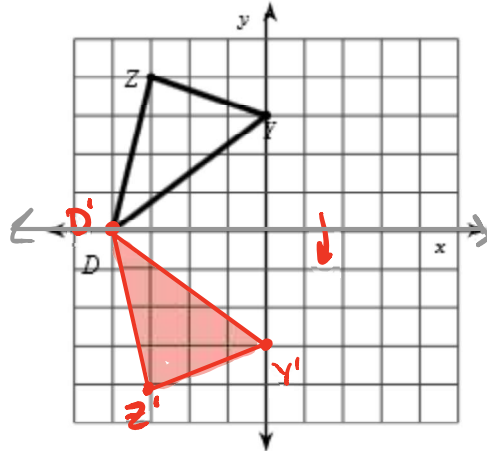
Name _____

Graph and label the image of the figure using the transformation given.

1) reflection across $y = x$ $(x, y) \rightarrow (y, x)$



2) reflection across the x -axis $(x, y) \rightarrow (x, -y)$



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

3) reflection across $x = 4$
 $F(3, -5), C(3, -4), P(5, -4)$

$F'(5, -5), C'(5, -4), P'(3, -4)$

4) reflection across $y = -x$ $(x, y) \rightarrow (-y, -x)$
 $X(-4, -3), M(-3, -2), I(-1, -5)$

$X'(3, 4), M'(2, 3), I'(5, 1)$

5) reflection across the y -axis $(x, y) \rightarrow (-x, y)$
 $N(-3, 1), G(0, 4), B(-1, 1)$

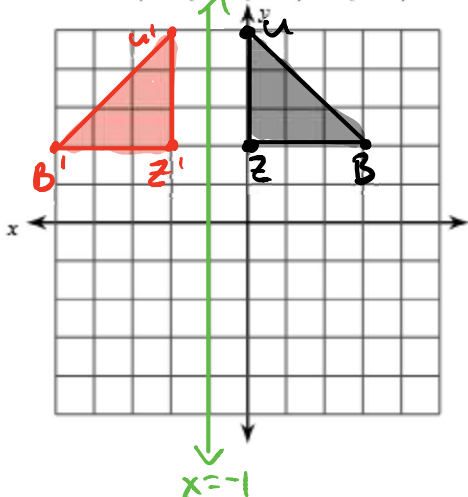
$N'(3, 1), G'(0, 4), B'(1, 1)$

6) reflection across the x -axis $(x, y) \rightarrow (x, -y)$
 $W(-4, 4), U(1, 5), K(0, 0)$

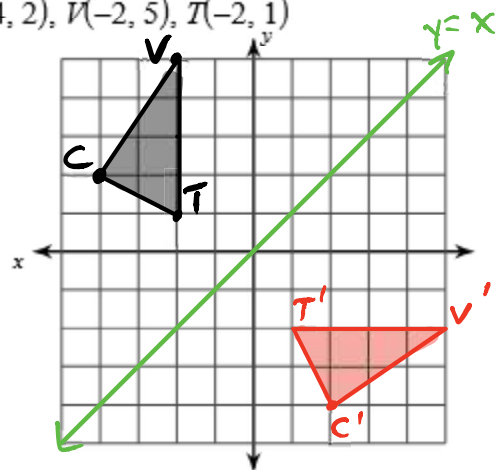
$W'(-4, -4), U'(1, -5), K'(0, 0)$

Graph the image and the preimage of the figure using the transformation given.

7) reflection across $x = -1$
 $Z(0, 2), U(0, 5), B(3, 2)$



8) reflection across $y = x$
 $C(-4, 2), V(-2, 5), T(-2, 1)$



Transformations – Reflections

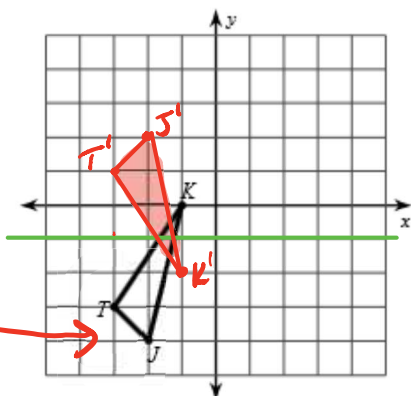
Hw Section 20.2

Name _____

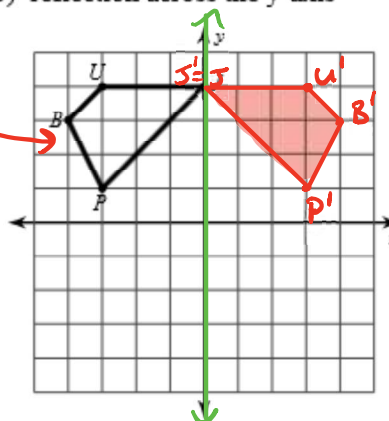
G.CO.A.5

Graph the image and the preimage of the figure using the transformation given.

9) reflection across $y = -1$

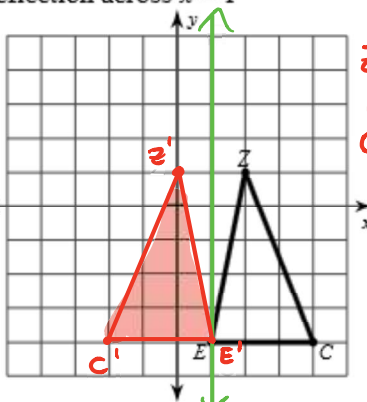


10) reflection across the y-axis



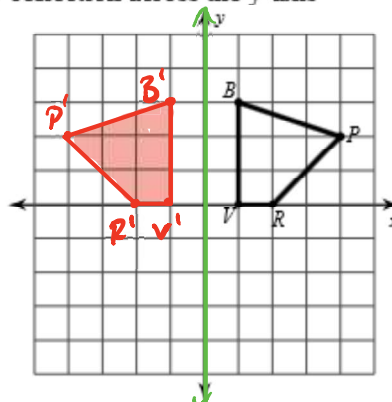
Find the coordinates of the vertices of each figure after the given transformation. Then graph the reflection.

11) reflection across $x = 1$



$Z'(0, 1)$
 $E'(1, -4)$
 $C'(-2, -4)$

12) reflection across the y-axis



$P'(-4, 2)$
 $B'(-1, 3)$
 $R'(-2, 0)$
 $V'(-1, 0)$

13) reflection across $x = -1$

$N(-3, 2), J(-2, 5), B(0, 4), V(-2, 1)$

$N'(1, 2), J'(0, 5), B'(-2, 4), V'(0, 1)$

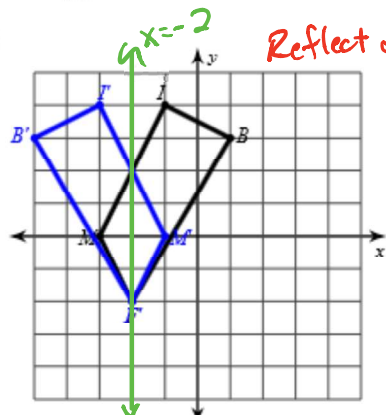
14) reflection across $y = -1$

$L(1, -2), V(2, 2), F(5, -1), D(4, -5)$

$L'(1, 0), V'(2, -4), F'(5, -1), D'(4, 3)$

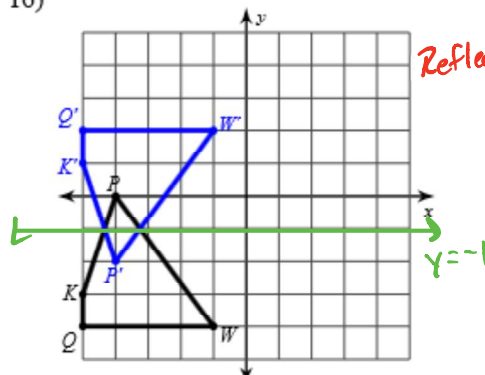
Tell the type of reflection that describes each transformation.

15)



Reflect over $x = -2$

16)



Reflect over $y = -1$

17) $Y(-4, 0), Q(-3, 2), L(2, 0), A(-2, -3)$

to $Q(2, -3), L(0, 2), A'(-3, -2), Y(0, -4)$

$(x, y) \rightarrow (y, x)$

Reflect over $y = x$

18) $B(3, -1), V(2, 2), Y(5, 5), J(5, 2)$

to $V(2, 2), Y(5, 5), J(2, 5), B'(-1, 3)$

$(x, y) \rightarrow (y, x)$

Reflect over $y = x$