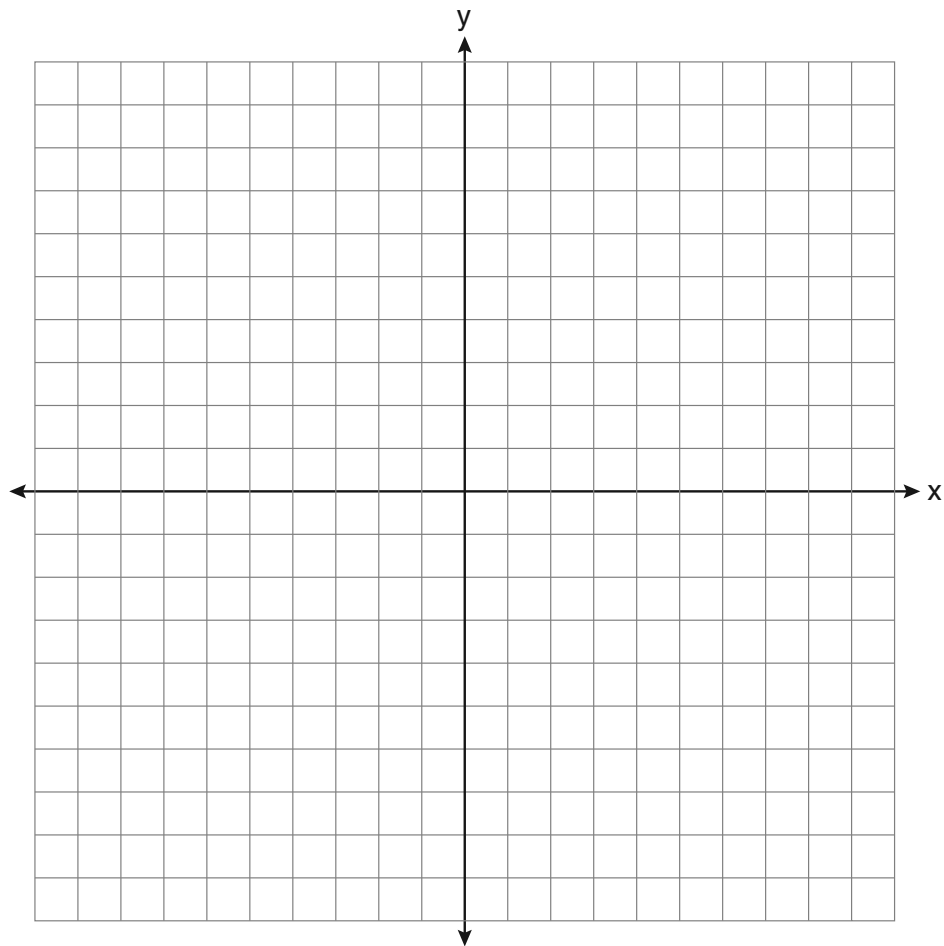**Homework**

1. Triangle ABC has the vertices $A(1,3)$, $B(2,6)$, and $C(7,5)$. Find the coordinates of $\Delta A'B'C'$, the image of ΔABC under the transformation $T_{-1,-5} \circ r_{y-axis}$.

Graph and label both triangles. What is the relationship of the areas of the triangles? Justify your answer.

y

x

2. Quadrilateral *MATH* has the vertices $M(-2,-1)$, $A(1,3)$, $T(6,3)$, and $H(3,-1)$. Plot and label the image of quadrilateral *MATH* under the transformation $r_{x\text{-axis}}$

   State the coordinates of the image. Justify why distances are preserved by the reflection. What type of quadrilateral is *MATH*?