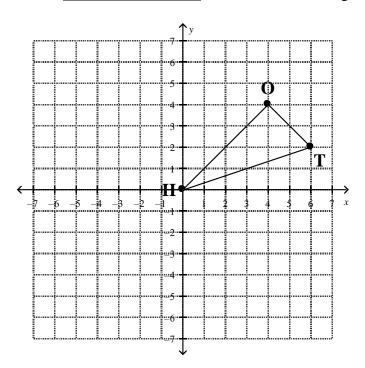
Name:
 Date:

Practice #2 – Reflections

Class: _____

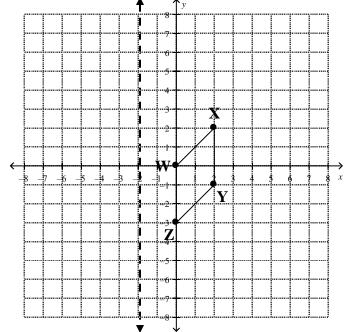
1. Find the reflection of the triangle *HOT* over the *x*-axis. <u>Write the coordinates</u> of H'O'T'. Is the image similar or congruent? How do you know?



2. Find the reflection of the quadrilateral *WXYZ* across the dotted line.

What is the equation of the dotted line?

Label the image W'X'Y'Z'.



Triangle PQR		Triangle <i>P'Q'R'</i>	
P	(-3, 2)	P '	
Q	(-3, 6)	Q'	
R	(-7, 7)	R'	

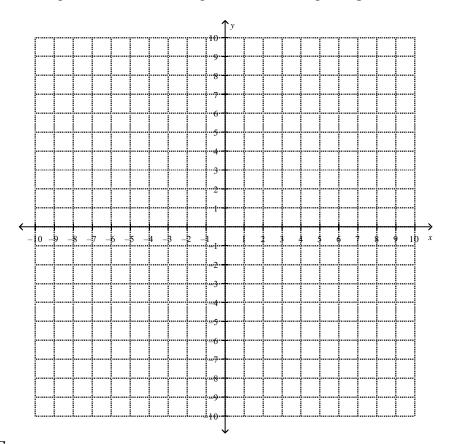
3. The table below shows the coordinates of triangle *PQR*.

Part A

Fill in the table above for the coordinates of P', Q', and R' after a reflection over the *y*-axis.

Part B

On the grid below, draw triangle PQR and triangle P'Q'R'.

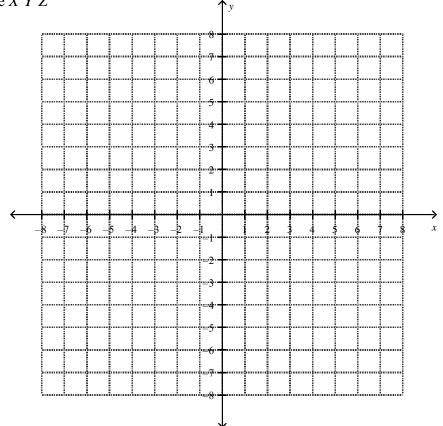


Part C

On the lines below, explain how you determined the location of R'.

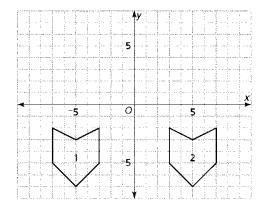
4. Triangle *XYZ* has vertices *X* (2, 1), *Y* (6,1), and *Z* (4, 4).

On the graph, draw the image of triangle *XYZ* after a translation two to the left. Label the image *X'Y'Z'* \uparrow_{y}

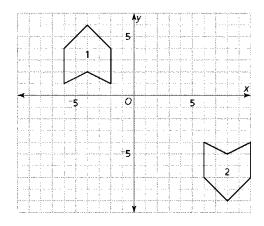


Now create triangle X''Y''Z'' by reflecting triangle X'Y'Z' over the *x*-axis. What will be the coordinates of triangle X''Y''Z''? Is the new image similar or congruent?

5. Describe a reflection that would move shape 1 to match shape 2.



6. Refer to the grid below:



a) Describe how you could move shape 1 to exactly match shape 2 by using one translation and one reflection.

b) Are there other sequences of transformations that would move shape 1 to exactly match shape 2? If so, describe the steps you would perform.