

Unit 9 - Transformations - Glossary Review
(Must be turned in on the day of the test)

Vocabulary:

1. *Pre-Image*: _____

2. *Image*: _____

3. *Isometry*: _____

4. *Invariant*: _____

5. *Orientation*: _____

Transformation	Notation	Mapping	Type of Isometry (Direct-Opposite-N/A)
1. Translation using $\langle a, b \rangle$		$(x, y) \rightarrow$	
2. Dilation of factor n		$(x, y) \rightarrow$	
3. Rotation 90°		$(x, y) \rightarrow$	
4. Rotation 180°		$(x, y) \rightarrow$	
5. Rotation 270°		$(x, y) \rightarrow$	
6. Reflection over x-axis		$(x, y) \rightarrow$	
7. Reflection over y-axis		$(x, y) \rightarrow$	
8. Reflection over $y = x$		$(x, y) \rightarrow$	
9. Reflection over $y = -x$		$(x, y) \rightarrow$	
10. Point reflection (through the origin)		$(x, y) \rightarrow$	
11. Glide Reflection (Using $\langle a, b \rangle$ and line m)		N/A	

Invariants:

1. *Distance & Segment Length* only change under _____.

2. *Orientation* only changes under an odd number of _____, but it does not change under an even number of _____.

3. Image & Pre-image are _____ under Dilation, but _____ under all other transformations.