Name Period

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| **Sec1** | **HW 9-1****Reflections & Translations** | **Unit 9** |

**Draw a sketch of the image reflected over the given line.**

1. 
2.



**Reflect the image of  in the given line and state the new vertices.**

1. ****
2. ****

**New vertices: New vertices:**

**     **

**Graph AND label each figure and its image under the given reflection, then state the new vertices.**

1. ** ** with    in the *x*-axis.
2. **** with     in the *y-*axis.

**New vertices: New vertices:**

1. ** ** with    over the line *y* = *x*.
2. **** with     over the line *y* = -*x*.

**New vertices: New vertices:**

**Describe the translation using coordinate notation.**

1. 
2. 

**Consider the translation that is defined by the coordinate notation **

1. What is the image of  ?
2. What is the preimage of  ?
3. What is the image of  ?
4. What is the image of  ?
5. What is the preimage of  ?
6. What is the preimage of  ?

**Use figure  and draw its image after the translation, then state the new vertices.**

1. ****

***P***

***S***

***R***

***Q***

***P***

***S***

***R***

***Q***

1. ****

**New vertices: New vertices:**