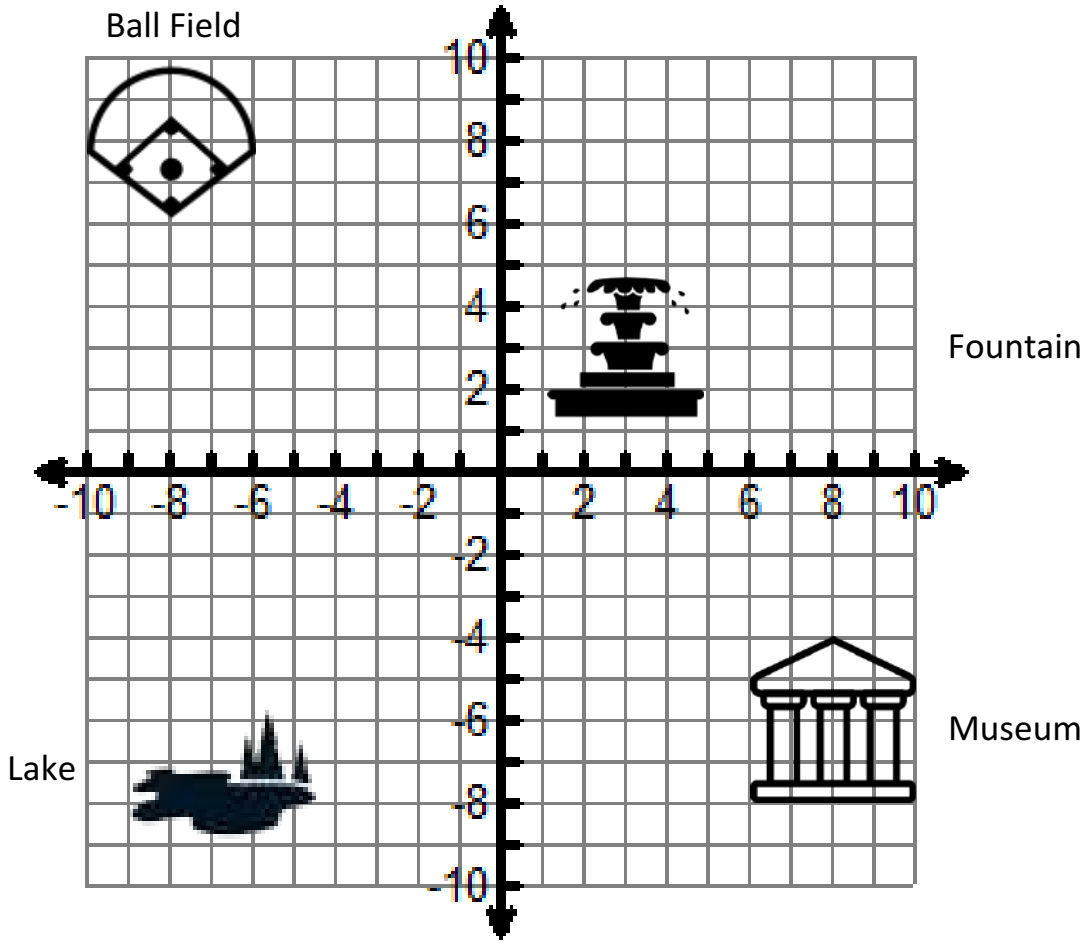
**Unit 5 Assessment 2 Review**

Name: _____
Date: _____ Period:_____

Instructions: You and your friends are planning on visiting different sites around the city. Given the following start position, get to the following places using transformations. Describe each transformation used and write a function for each. **Make sure to use <u>ALL</u> transformations in each problem.**



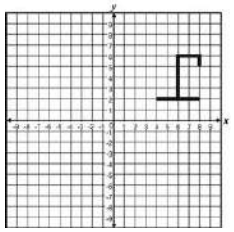

1) Your starting position is: $(8, 9)$
   a) Get to the Ball Field.
   b) Back at your start position, get to the Lake.
   c) Back at your start position, get to the Museum.
   d) Back at your start position, get to the Fountain.

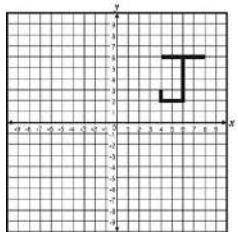
2) Your starting position is: $(-8, -8)$
   a) Get to the Ball Field.
   b) Back at your start position, get to the Lake.
   c) Back at your start position, get to the Museum.
   d) Back at your start position, get to the Fountain.

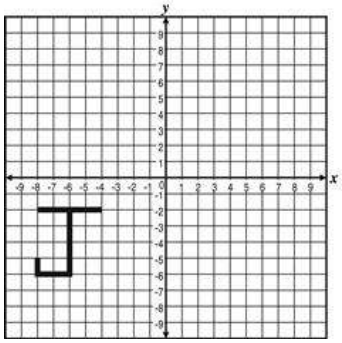
3) Your starting position is: $(3, -2)$
   a) Get to the Ball Field.
   b) Back at your start position, get to the Lake.
   b) Back at your start position, get to the Museum.
   c) Back at your start position, get to the Fountain.

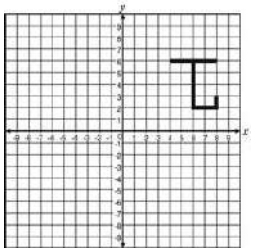
4) What are the vertices of the new image of A(-3,1), B(0, 2), C(2, -4) after
   a. a clockwise rotation of 270°
   b. a translation right by 2 and down by 5
   c. a reflection over the x-axis

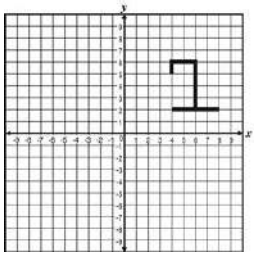
5) Jamila wrote her initial on a coordinate plane. Describe and write a function for each of the following transformations:

a. 

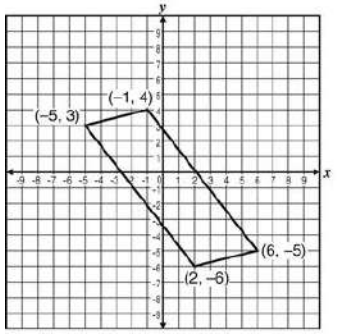
b. 



c. 

d. 

6) List the new vertices for the parallelogram for the figure when the following transformations are preformed:
   a. Rotated counter clockwise 90°
   b. Reflected over the y-axis
   c. Rotated 180°
   d. Translated up 10 units




7) **MULTIPLE CHOICE:** If the graph of a linear equation is translated 4 units down, which statement best describes the change to the equation?
   a. The *y*-intercept of the equation is decreased by 4.
   b. The *y*-intercept of the equation is decreased by 4.
   c. The slope is changed by a factor of $-4$.
   d. The slope is changed by a factor of 4.

8) **Describe** the transformation of the following points:
   a. (4, 1) ⟶ (-4, 1)
   b. (-2, 3) ⟶ (4, 1)
   c. (2, -3) ⟶ (-3, -2)
   d. (4, 1) ⟶ (-4, -1)
   e. (-2, 3) ⟶ (-2, -3)
   f. (2, 1) ⟶ (-1, 2)

**G.CO.1 Vocab Review**

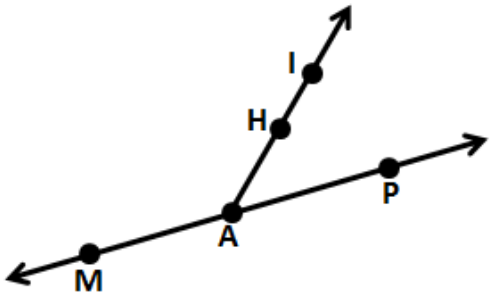
1. Explain the meaning of each of the following based on the geometric picture:

1) $\overleftrightarrow{AP}$

2) $\overrightarrow{AP}$

3) $\overrightarrow{PA}$

4) $\overline{AP}$




2. Identify if each of the following can be used to name the angle on the <u>right</u> in the diagram. Explain why or why not.

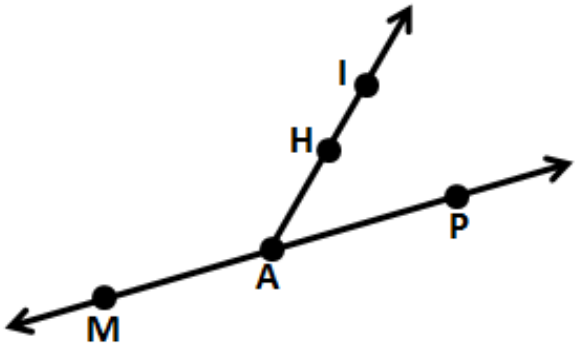
1) ∠A

2) ∠PAH

3) ∠HA

4) ∠IAP

5) ∠HAM




3. Parallel lines _____ (always, sometimes, never) intersect.

4. (Multiple Choice) If line AB crosses line CD at point O, <AOD and <COB must be _____.
A. Obtuse B. Congruent C. complementary D. Adjacent

5. MEMORIZE THE VOCABULARY

6. If <A and <B are supplements and m<A = 100°, what is m<B? _____

7. If <A and <B are complements and m<A = 48°, what is m<B? _____

8. If <A and <B are vertical angles and m<A = 75°, what is m<B?_____

9. If <A and <B are a linear pair and m<A = 3x + 6 and m<B = 2x + 4, what is the value of x? x = _____

10. If <A and <B are vertical angles and m<A = 5x – 3 and m<B = 6x + 8, what is the value of x? x = _____