Geometry ADAM #1 Common Unit Assessment Review

1.	Vocabulary
2.	Identify Transformation
3.	Midpoint Formula
4.	Reflection
5.	Distance 2/3^{rds}
6.	Perpendicular Lines
7.	Identifying Transformation
8.	Dilation
9.	Composition – Rotation about a point/reflection
10.	Symmetry
11.	Centroid

Important Notes/Formulas:

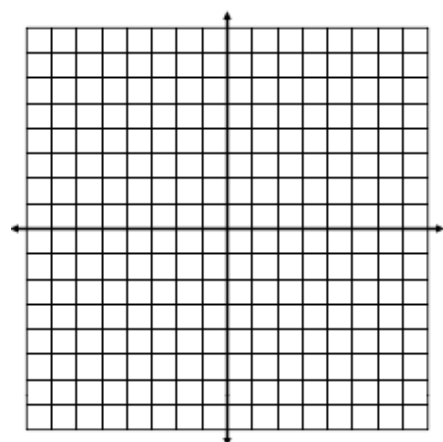|	
1. **Define the vocabulary below:** ❖ **Circle:** ❖ **Angle:** ❖ **Line Segment:**	2. **Find the midpoint between the two points** A (-4, 3) & B (6, -4)
3. Triangle JKL with vertices J(-3, 7), K(-2, 3), and L(-5, 1). **reflect in the line y = x.** J' (_____, _____) K' (_____, _____) L' (_____, _____)	4. **On a coordinate plane, the transformation characteristics are as follows** ❖ The same angle measures as the preimage ❖ Different side lengths **What could be the transformation rule?**

5. **Define the following types of lines** ❖ **Parallel Lines:** ❖ **Perpendicular:**	6. **Identify the transformation of the figure:**
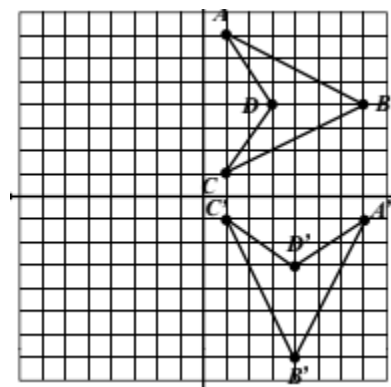
7. Graph the Triangle ABC	
A (3, 2)	
B (1, 3)	
C (1, -2)	
Rotate the figure 270 degrees about point C, and then reflect it across the x – axis	
A''	
B''	
C''	
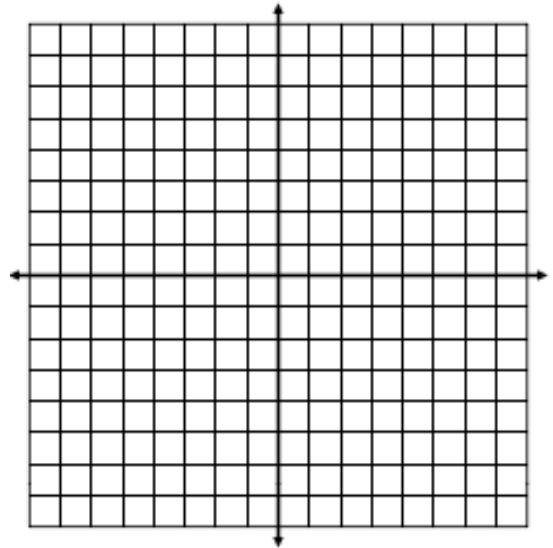
8. Which of the following transformations maps the original figure onto itself? Select ALL that apply

   a. A square is reflected across one of its sides

   b. An isosceles triangle is reflected across its line of symmetry

   c. A rectangle is reflected across its diagonal

   d. A square is reflected across its diagonal

   e. A regular octagon is rotated 45 degrees counterclockwise about its center

   f. A regular pentagon is rotated 60 degrees about its center

9. A park and its triangular vertices are located at A (-3, 5) B (-1, -1) C (-5, 2). The park planner plans to locate a basketball court at the park's centroid $\frac{2}{3}$ of the way from vertex A to the midpoint of side BC.

What is the midpoint of BC?

Where is the basketball court located?