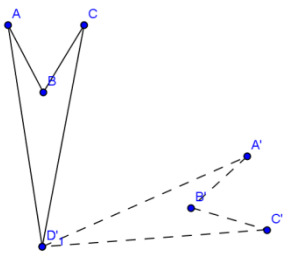
Name: _____ Module 1: Topic C: Lesson 13

Date: _____ Period: _____ Problem Set

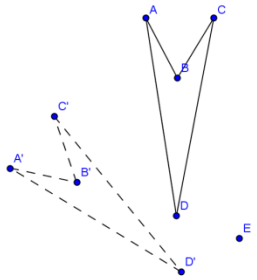
Finding the degree of rotation:

To determine the angle of rotation, you measure the angle formed by connecting corresponding vertices to the center point of rotation. In Exercise 1, measure $\angle AD'A'$. What happened to $\angle D$? Can you see that D is the center of rotation, therefore mapping D' onto itself? Before leaving Exercise 1, try drawing $\angle BD'B'$. Do you get the same angle measure? What about $\angle CD'C'$?

1.

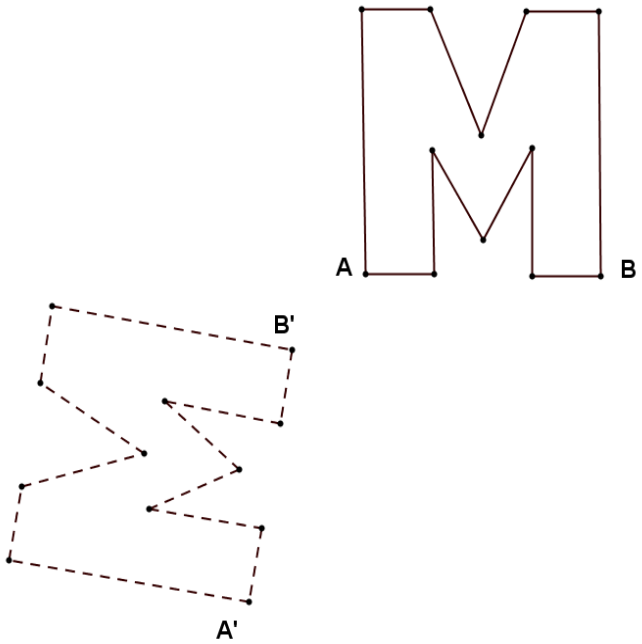


2.

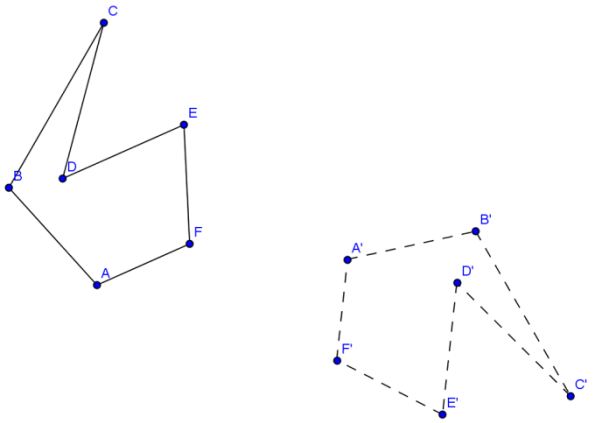


Finding the center of rotation:

a. Draw a segment connecting points A and A'.
b. Using a compass and straightedge, find the perpendicular bisector of this segment.
c. Draw a segment connecting points B and B'.
d. Find the perpendicular bisector of this segment.
e. The point of intersection of the two perpendicular bisectors is the center of rotation. Label this point P.



4. Find the center of rotation.



5. Find the center of rotation.