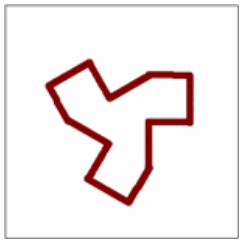
Geometry – Mr. Bo
Unit 2B – Day 3 HW

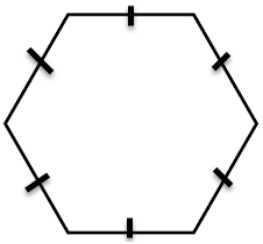
Name_____
Date_____

1. Determine which of these shapes has rotational symmetry. For those that do, determine the angel of rotation.

a.

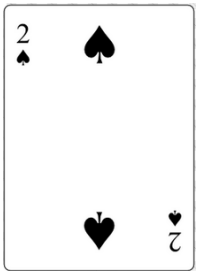


b.

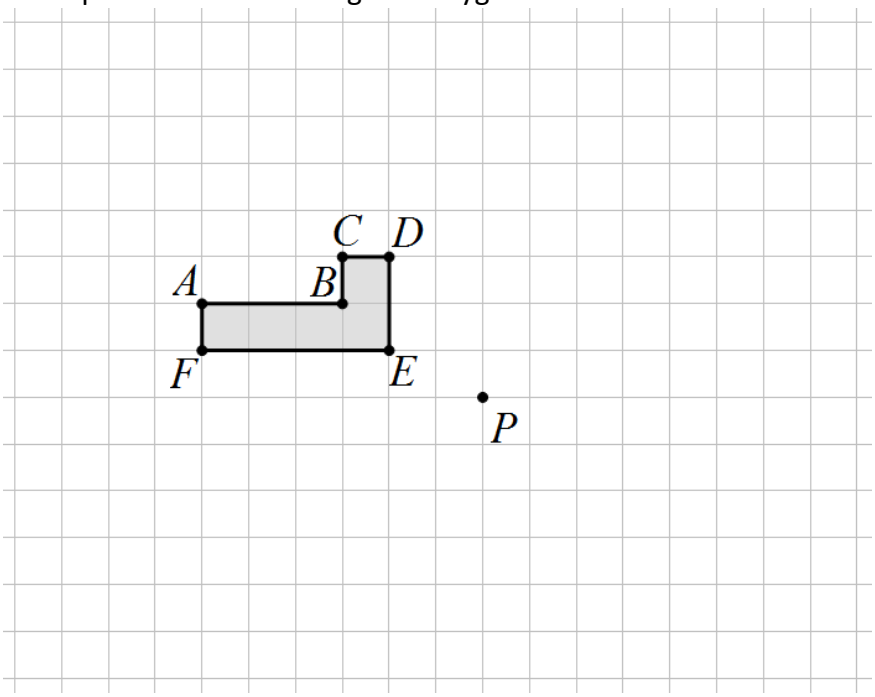


c.

d.



2. Graph and label the image of Polygon ABCDE under each of the following transformations:



a. $R_{P,90^o}$

b. $R_{P,-90^o}$

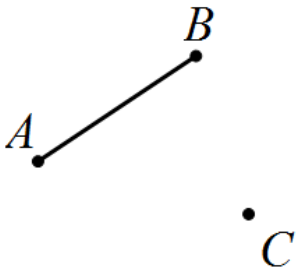
c. $T_{\langle 9,-4 \rangle}$

d. $r_{\overleftrightarrow{CD}}$

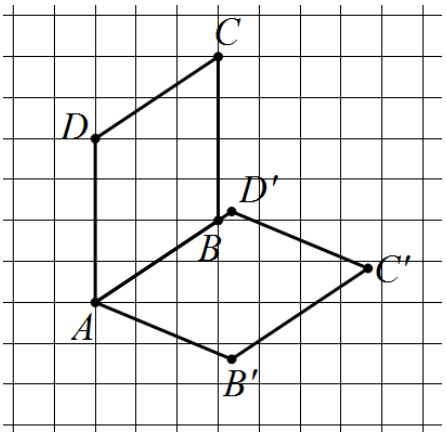
3. Which of the transformations in #2 does not preserve orientation? Explain your reasoning.

4. Which of the transformations is #2 preserves parallelism? Explain your reasoning.

5. Use a compass and/or protractor to rotate $\overline{AB}$ 150 degrees around C.



6.



a. Prove quadrilateral ABCD is a parallelogram. ***(mixed review)***

b. Describe precisely a single rigid motion that maps parallelogram ABCD onto quadrilateral AB'C'D'.

c. Is quadrilateral AB'C'D' a parallelogram? Justify your response.

d. Explain how parallelogram ABCD can be used to find the area of quadrilateral AB'C'D'. Find the area of AB'C'D'. ***(mixed review)***