NAME DATE PERIOD

Unit 1: End-of-Unit Assessment

A straight edge and tracing paper are required for this assessment.

1. Select **all** the true statements.

   A. Two squares with the same side lengths are always congruent.

   B. Two rectangles with the same side lengths are always congruent.

   C. Two rhombuses with the same side lengths are always congruent.

   D. Two parallelograms with the same side lengths are always congruent.

2. Which of these sequences of transformations would ***not*** return a shape to its original position?

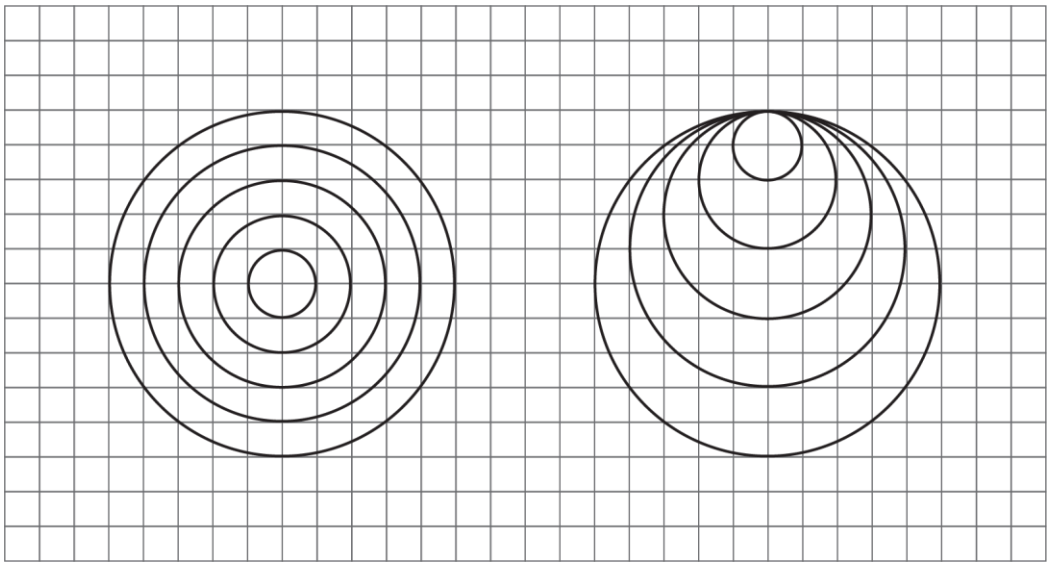
   A. Translate 3 units up, then 3 units down.

   B. Reflect over line p, then reflect over line p again.

   C. Translate 1 unit to the right, then 4 units to the left, then 3 units to the right.

   D. Rotate 120° counterclockwise around center C, then rotate 220° counterclockwise around C again.

3. Diego made the shape on the left, and Elena made the shape on the right. Each shape uses 5 circles.



NAME DATE PERIOD

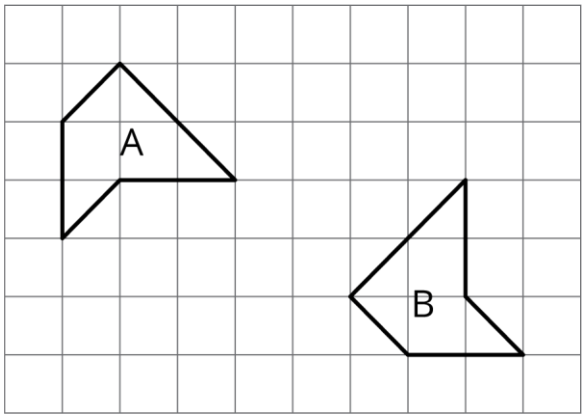
Select **all** the true statements.

A. The smallest circle in Diego's design is congruent to the smallest circle in Elena's design.

B. Diego's design is congruent to Elena's design.

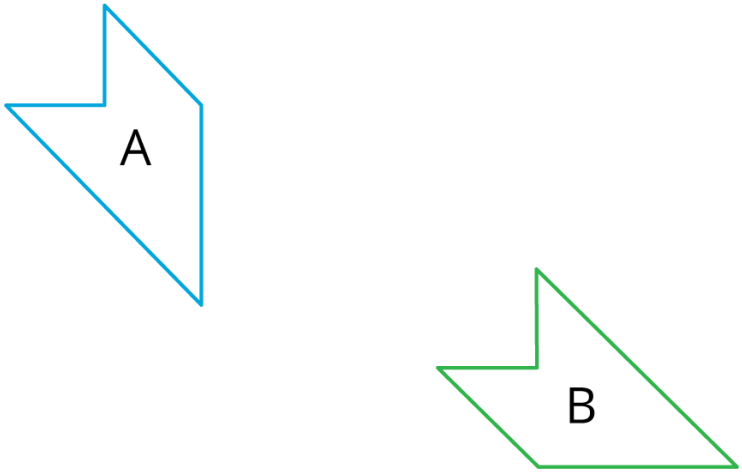
C. Elena's design is a translation of Diego's design.

4. Show that Polygon A is congruent to Polygon B.



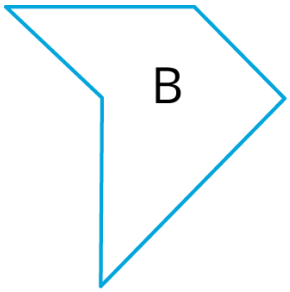
5. For each pair of shapes, decide whether or not Shape A is congruent to Shape B. Explain your reasoning.

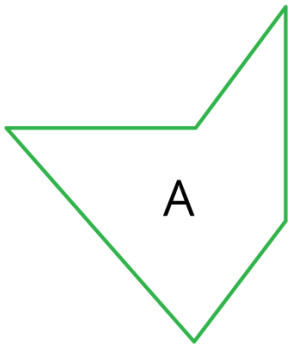
a. First pair:



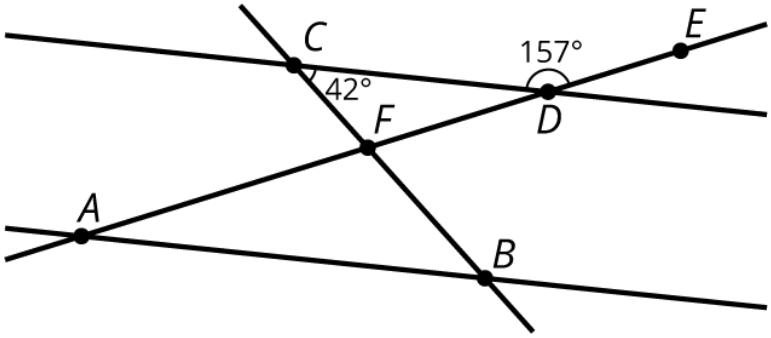
b. Second pair:

NAME DATE PERIOD

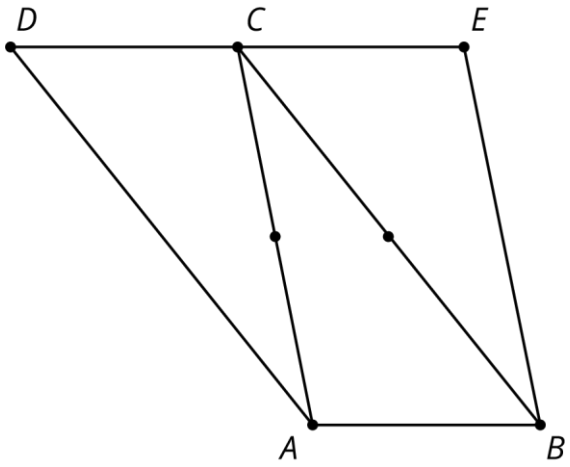




6. Lines AB and CD are parallel. Find the measures of the three angles in triangle ABF.



7. Triangle CDA is the image of triangle ABC after a 180° rotation around the midpoint of segment AC. Triangle ECB is the image of triangle ABC after a 180° rotation around the midpoint of segment BC.



NAME DATE PERIOD

a. Explain why $ABCD$ and $ABEC$ are parallelograms.

b. Identify at least two pairs of congruent angles in the figure and explain how you know they are congruent.

c. Explain how to use what you know about the sum of the angles in a triangle to figure out the sum of the angles of quadrilateral $ABED$.