NAME DATE PERIOD

Unit 2, Lesson 7

Practice Problems

1. Triangle DEF is a dilation of triangle ABC with scale factor 2. In triangle ABC, the largest angle measures 82°. What is the largest angle measure in triangle DEF?

   A. 41°

   B. 82°

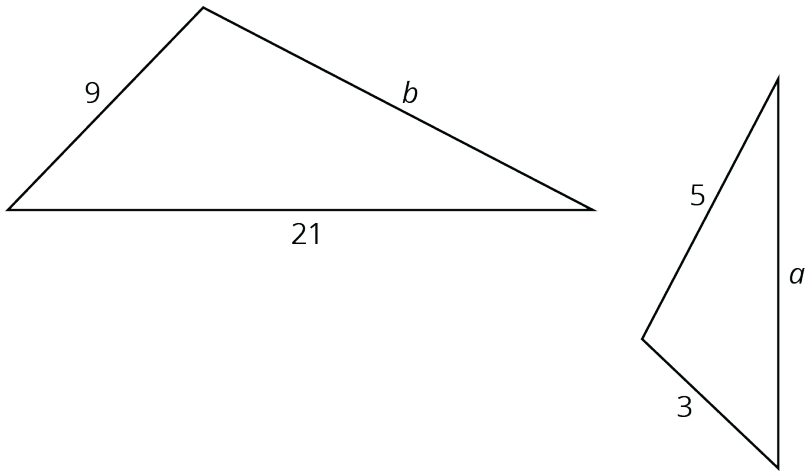
   C. 123°

   D. 164°

2. Draw two polygons that are similar but could be mistaken for not being similar. Explain why they are similar.

3. Draw two polygons that are *not* similar but could be mistaken for being similar. Explain why they are not similar.

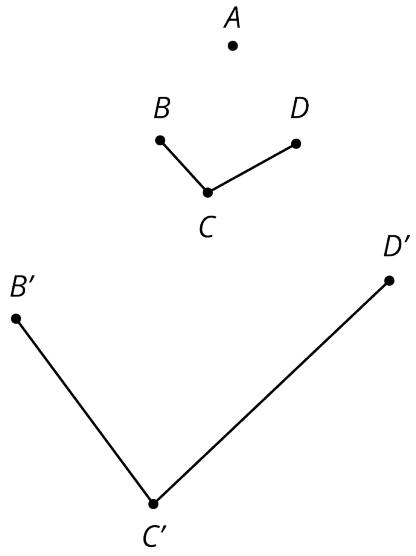
4. These two triangles are similar. Find side lengths a and b. Note: the two figures are not drawn to scale.



NAME DATE PERIOD

5. Jada claims that $B'C'D'$ is a dilation of BCD using A as the center of dilation.

   What are some ways you can convince Jada that her claim is not true?



6. a. Draw a horizontal line segment AB.
   b. Rotate segment AB 90° counterclockwise around point A. Label any new points.
   c. Rotate segment AB 90° clockwise around point B. Label any new points.
   d. Describe a transformation on segment AB you could use to finish building a square.