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°

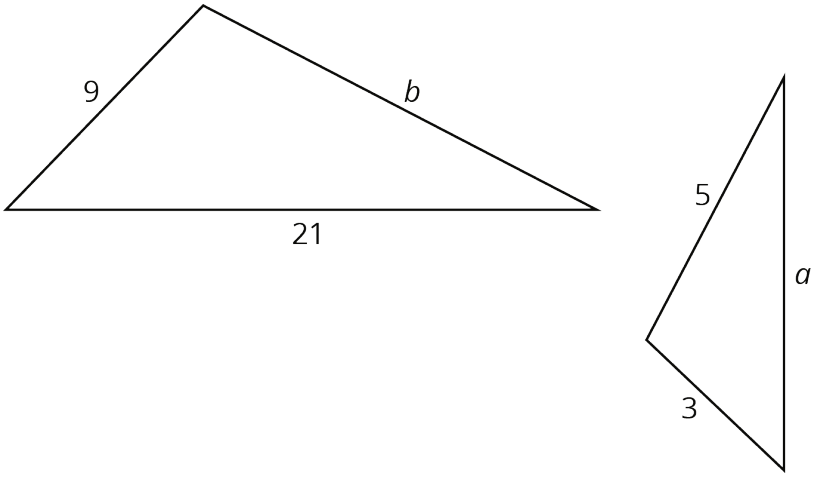
   C. 123°

   D. 164°

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

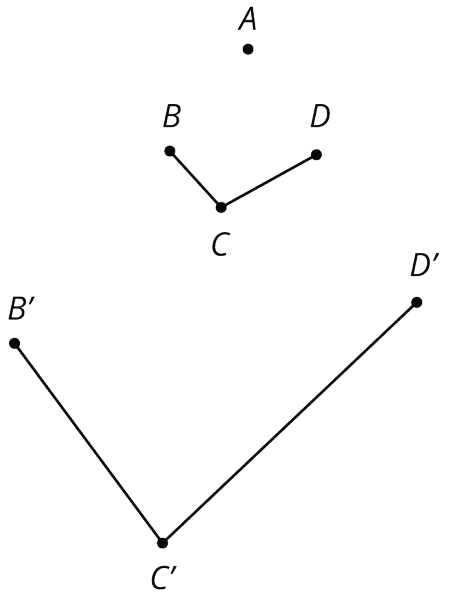
3. Draw two polygons that are *not* similar but could be mistaken for being similar. Explain why they are not similar.

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



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?



(From Unit 2, Lesson 3.)

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.

(From Unit 1, Lesson 8.)