### Lesson 12 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 $DEF$?
	1. $41^{∘}$
	2. $82^{∘}$
	3. $123^{∘}$
	4. $164^{∘}$
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.
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1. 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?
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* (From Unit 2, Lesson 9.)
	1. Draw a horizontal line segment $AB$.
	2. Rotate segment $AB$ $90^{∘}$ counterclockwise around point $A$. Label any new points.
	3. Rotate segment $AB$ $90^{∘}$ clockwise around point $B$. Label any new points.
	4. Describe a transformation on segment $AB$ you could use to finish building a square.
* (From Unit 1, Lesson 7.)



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