### Lesson 11 Practice Problems

1. Each diagram has a pair of figures, one larger than the other. For each pair, show that the two figures are similar by identifying a sequence of translations, rotations, reflections, and dilations that takes the smaller figure to the larger one.
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1. Here are two similar polygons.
* Measure the side lengths and angles of each polygon. What do you notice?
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1. Each figure shows a pair of similar triangles, one contained in the other. For each pair, describe a point and a scale factor to use for a dilation moving the larger triangle to the smaller one. Use a measurement tool to find the scale factor.
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1. Describe a sequence of translations, rotations, and reflections that takes Polygon P to Polygon Q.
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* (From Unit 1, Lesson 3.)
	1. Draw the translated image of $ABCDE$ so that vertex $C$ moves to $C^{′}$. Tracing paper may be useful.
	+ 
	1. Draw the reflected image of Pentagon $ABCDE$ with line of reflection $ℓ$. Tracing paper may be useful.
	+ 
	1. Draw the rotation of Pentagon $ABCDE$ around $C$ clockwise by an angle of 150 degrees. Tracing paper and a protractor may be useful.
	+ 
* (From Unit 1, Lesson 2.)



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