### Lesson 5 Practice Problems

1. Quadrilateral $ABCD$ is dilated with center $\left(0,0\right)$, taking $B$ to $B^{′}$. Draw $A^{′}B^{′}C^{′}D^{′}$.
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1. Triangles $B$ and $C$ have been built by dilating Triangle $A$.
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	1. Find the center of dilation.
	2. Triangle $B$ is a dilation of $A$ with approximately what scale factor?
	3. Triangle $A$ is a dilation of $B$ with approximately what scale factor?
	4. Triangle $B$ is a dilation of $C$ with approximately what scale factor?
1. Here is a triangle.
	1. Draw the dilation of triangle $ABC$, with center $\left(0,0\right)$, and scale factor 2. Label this triangle $A^{′}B^{′}C^{′}$.
	2. Draw the dilation of triangle $ABC$, with center $\left(0,0\right)$, and scale factor $\frac{1}{2}$. Label this triangle $A^{″}B^{″}C^{″}$.
	3. Is $A^{″}B^{″}C^{″}$ a dilation of triangle $A^{′}B^{′}C^{′}$? If yes, what are the center of dilation and the scale factor?
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1. Triangle $DEF$ is a right triangle, and the measure of angle $D$ is $28^{∘}$. What are the measures of the other two angles?
* (From Unit 1, Lesson 15.)



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