## Lesson 5 Practice Problems

1. Quadrilateral $A B C D$ is dilated with center $(0,0)$, taking $B$ to $B^{\prime}$. Draw $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$.

2. Triangles $B$ and $C$ have been built by dilating Triangle $A$.



B

a. Find the center of dilation.
b. Triangle $B$ is a dilation of $A$ with approximately what scale factor?
c. Triangle $A$ is a dilation of $B$ with approximately what scale factor?
d. Triangle $B$ is a dilation of $C$ with approximately what scale factor?
3. Here is a triangle.
a. Draw the dilation of triangle $A B C$, with center ( 0,0 ), and scale factor 2. Label this triangle $A^{\prime} B^{\prime} C^{\prime}$.
b. Draw the dilation of triangle $A B C$, with center $(0,0)$, and scale factor $\frac{1}{2}$. Label this triangle $A^{\prime \prime} B^{\prime \prime} C^{\prime \prime}$.
c. Is $A^{\prime \prime} B^{\prime \prime} C^{\prime \prime}$ a dilation of triangle $A^{\prime} B^{\prime} C^{\prime}$ ? If yes, what are the center of dilation and
 the scale factor?
4. Triangle $D E F$ is a right triangle, and the measure of angle $D$ is $28^{\circ}$. What are the measures of the other two angles?
(From Unit 1, Lesson 15.)

