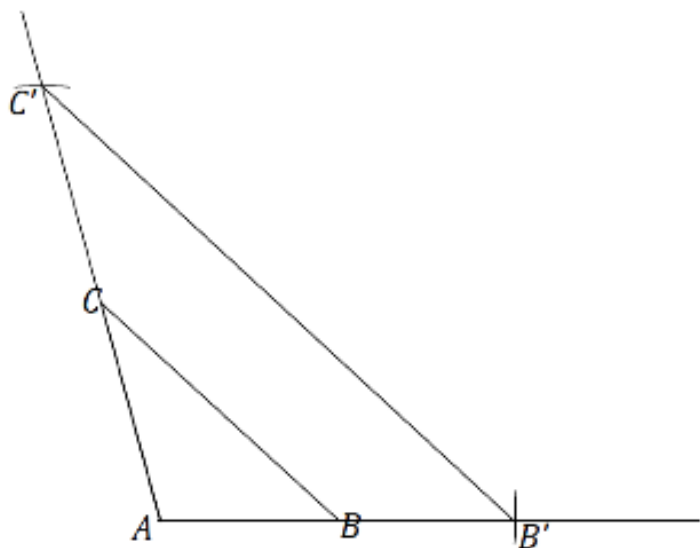


Name:

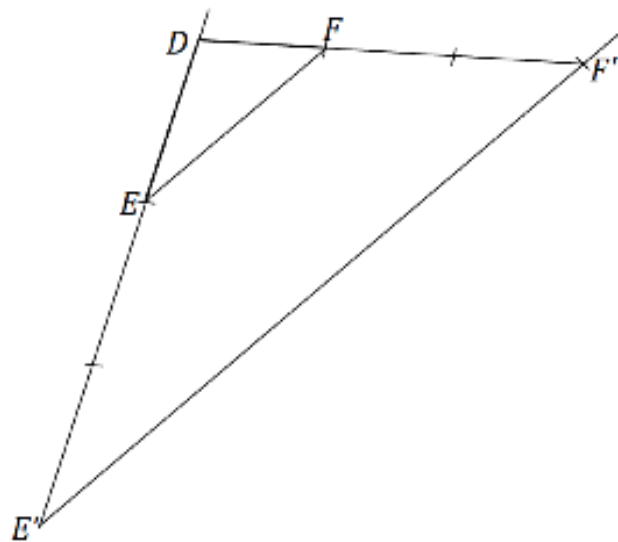
1. Create a scale drawing of $\triangle ABC$ with a scale factor of $r = 2$. Label your new three vertices A' , B' , & C' .



a. What do you notice about the side lengths of $\triangle ABC$ in relation to the side lengths of $\triangle A'B'C'$?

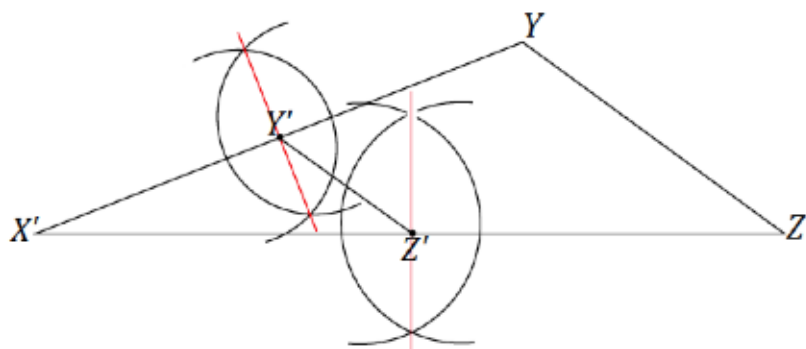
b. What do you notice about the corresponding angle measurements?

2. Create a scale drawing of $\triangle DEF$ with a scale factor of $r = 3$. Label your new three vertices D' , E' , & F' .



Name:

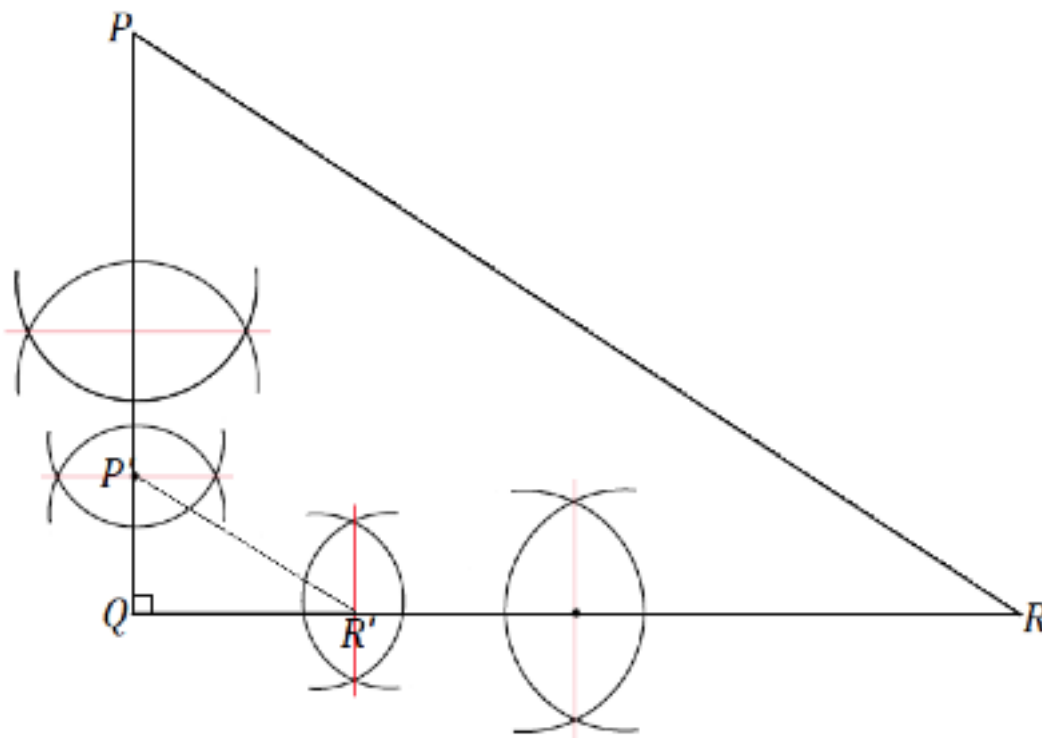
3. Create a scale drawing of ΔXYZ with a scale factor of $r = \frac{1}{2}$. Label your new three vertices $X', Y', \& Z'$.



a. What do you notice about the side lengths of ΔXYZ in relation to the side lengths of $\Delta X'Y'Z'$?

b. What do you notice about the corresponding angle measurements?

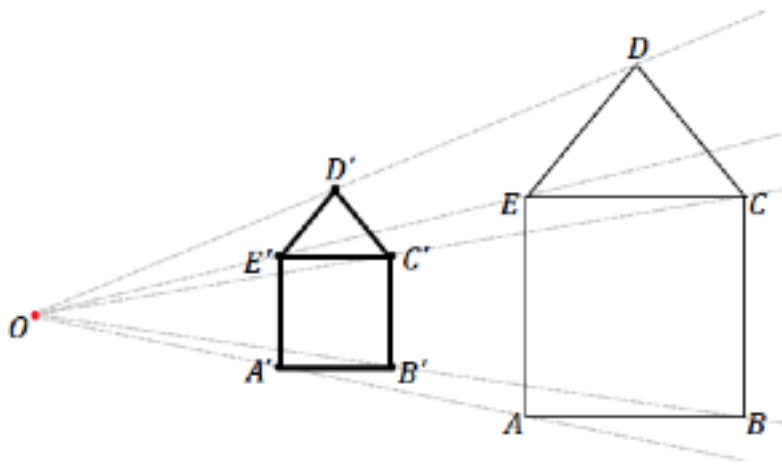
4. Create a scale drawing of ΔPQR with a scale factor of $r = \frac{1}{4}$. Label your new vertices $P', Q', \& R'$.



Name:

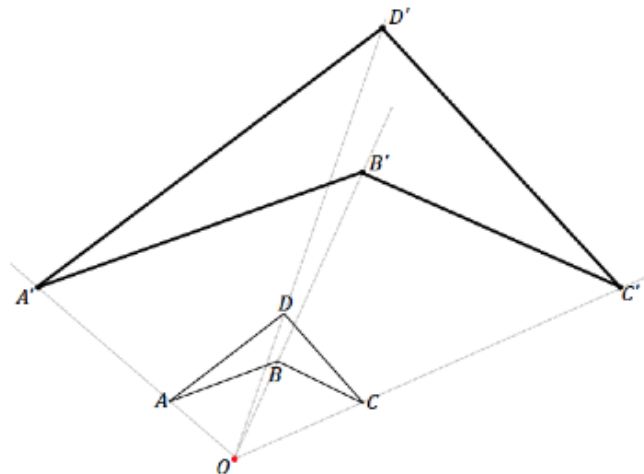
5. We must have a scale factor and a center in order to dilate the vertices of a polygonal figure. Below, we have a figure with center O and a scale factor of $r = \frac{1}{2}$. What effect should we expect this scale factor to have on the image of the figure?

- a. To create a scale drawing of the figure below with center O and scale factor $r = \frac{1}{2}$,
- Draw a ray beginning at O through each vertex of the figure.
 - With a ruler, find the midpoint between O and D , and then each of the other vertices. Label each respective midpoint with prime notation (i.e. D')
 - Join new vertices in the way they are joined in the original figure.



Does the new figure appear to be a scale drawing of the original? How do you know?

6. Using the same method as above, create a scale drawing of the figure below about center O and scale factor $r = 3$.



Name:

7. $\Delta A'B'C'$ is a scale drawing of ΔABC . Use your ruler to determine the location of the center O used for the scale drawing.

