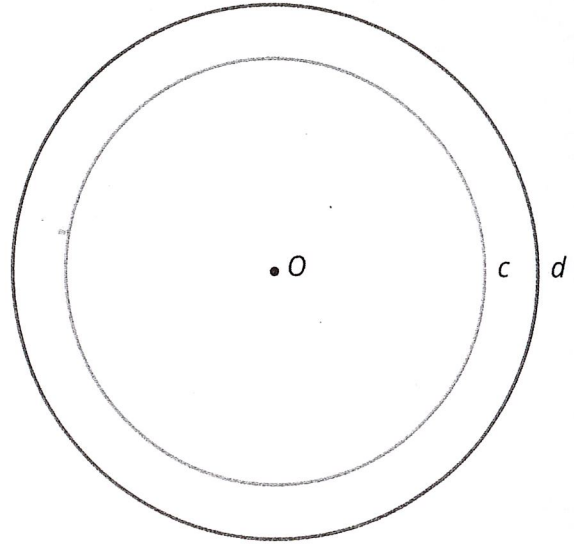


Lesson 2 Practice Problems

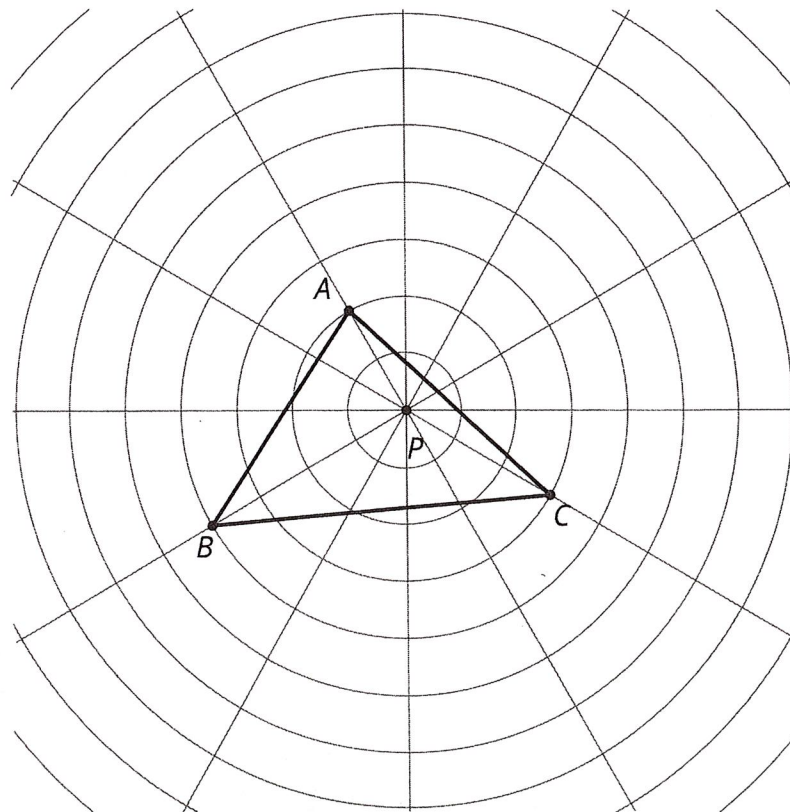
1. Here are Circles c and d . Point O is the center of dilation, and the dilation takes Circle c to Circle d .

a. Plot a point on Circle c . Label the point P . Plot where P goes when the dilation is applied.

b. Plot a point on Circle d . Label the point Q . Plot a point that the dilation takes to Q .



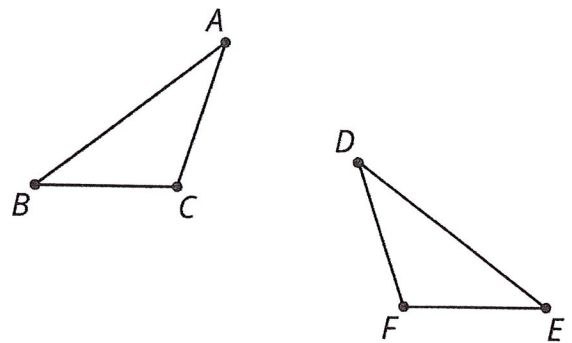
2. Here is triangle ABC .



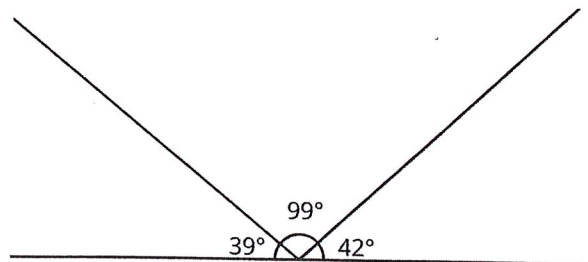
- Dilate each vertex of triangle ABC using P as the center of dilation and a scale factor of 2. Draw the triangle connecting the three new points.
- Dilate each vertex of triangle ABC using P as the center of dilation and a scale factor of $\frac{1}{2}$. Draw the triangle connecting the three new points.
- Measure the longest side of each of the three triangles. What do you notice?
- Measure the angles of each triangle. What do you notice?

3.

Describe a rigid transformation that you could use to show the polygons are congruent.



4. The line has been partitioned into three angles.



Is there a triangle with these three angle measures? Explain.