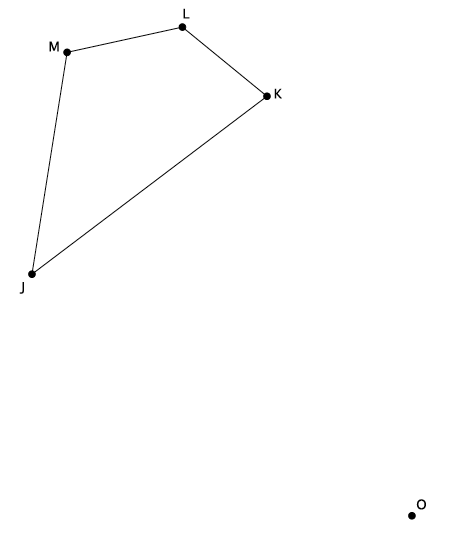
**Problem Set**

Lesson Summary

Dilations map lines to lines, rays to rays, and segments to segments. Dilations map angles to angles of the same degree.

1. Use a ruler to dilate the following figure from center , with scale factor .

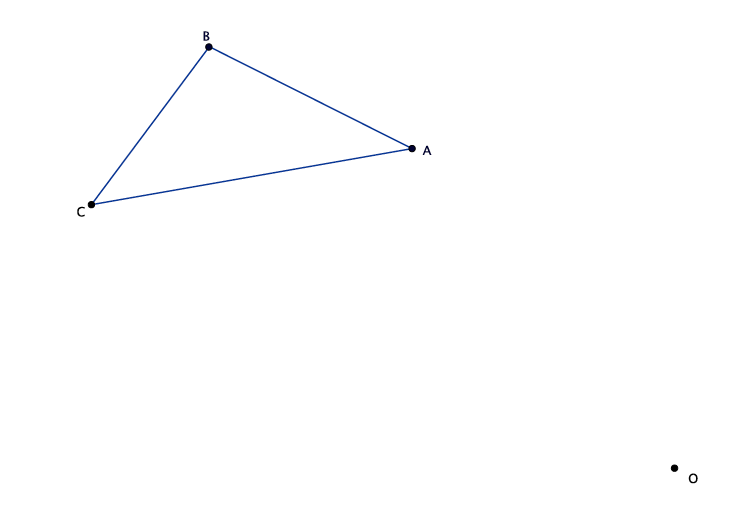


1. Use a compass to dilate the figure from center , with scale factor .

Macintosh HD:Users:shassan:Dropbox:Module 3:Images:Properties of dilations:ps2s.pdf

* 1. Dilate the same figure, , from a new center, , with scale factor . Use double primes () to distinguish this image from the original.
  2. What rigid motion, or sequence of rigid motions, would map *to*

1. Given center and triangle , dilate the figure from center by a scale factor of . Label the dilated triangle *.*



1. A line segment undergoes a dilation. Based on today’s lesson, what will the image of the segment be?
2. Angle measures . After a dilation, what will the measure of be? How do you know?