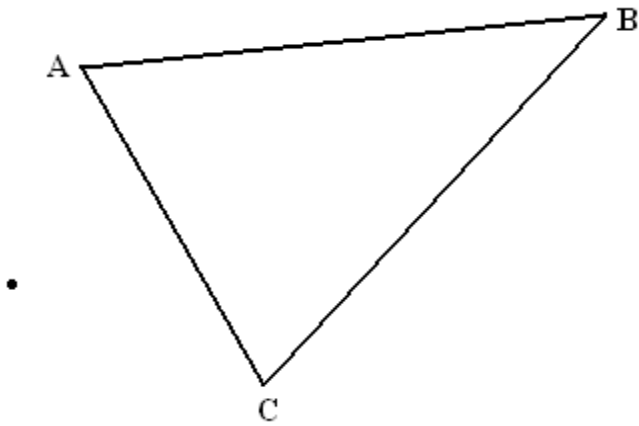


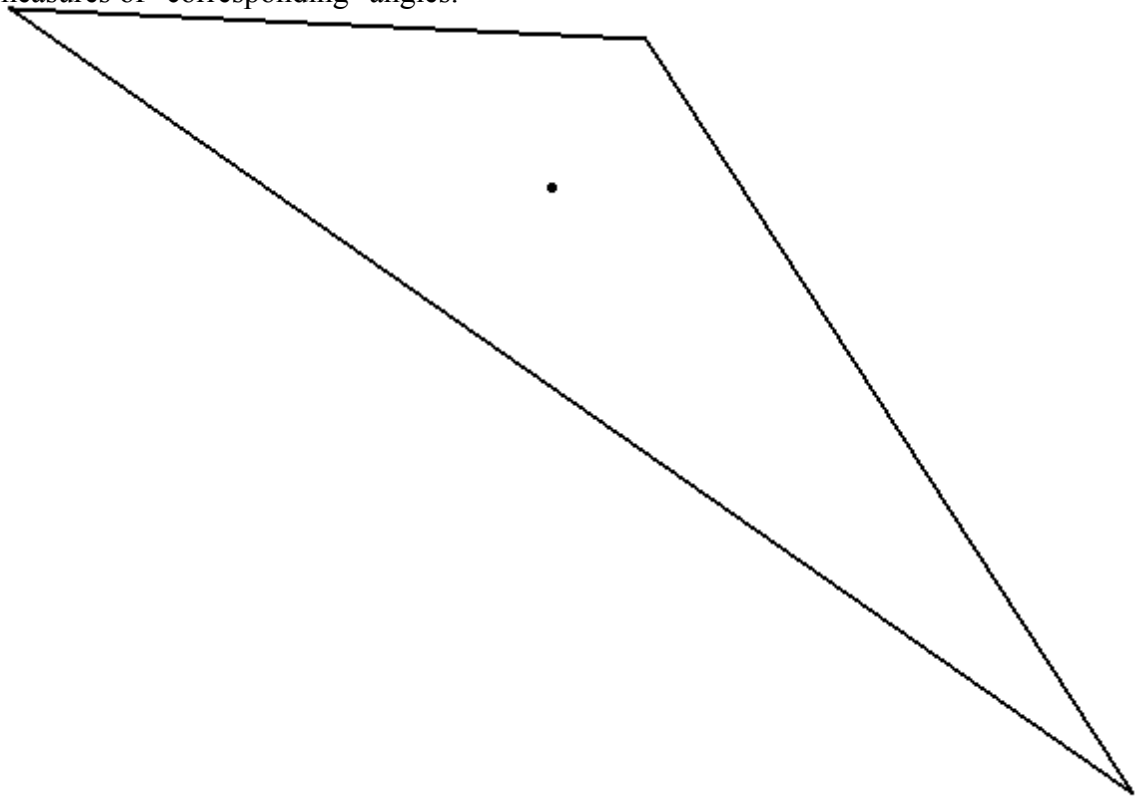
**Advanced Geometry**  
**Dilations HW**

**Name:** \_\_\_\_\_

**[EX 1]** Given the figure, the center of dilation, and the scale factor (1.5), use a ruler to draw the image of dilation. After this has been completed, investigate the ratios of "corresponding" sides and the measures of "corresponding" angles.

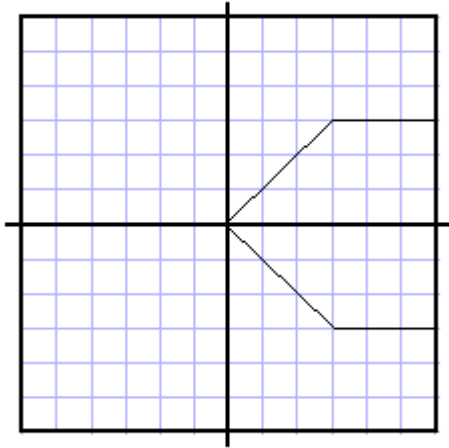


**[EX 2]** Given the figure, the center of dilation, and the scale factor (1/3), use a ruler to draw the image of dilation. After this has been completed, investigate the ratios of "corresponding" sides and the measures of "corresponding" angles.



[EX 3]

Given the figure below with A(0,0), B(3,3), C(6,3), D(6,-3), E(3,-3), find the image after a dilation of 1/3 is performed.



$$\frac{A'B'}{AB} =$$

$$\frac{D'E'}{DE} =$$

$$\frac{B'C'}{BC} =$$

$$\frac{A'E'}{AE} =$$

$$\frac{C'D'}{CD} =$$

$$m \angle A =$$

$$m \angle B =$$

$$m \angle C =$$

$$m \angle D =$$

$$m \angle E =$$

$$m \angle A' =$$

$$m \angle B' =$$

$$m \angle C' =$$

$$m \angle D' =$$

$$m \angle E' =$$

[EX 4]

Given the completed dilation, find its center and scale factor.

