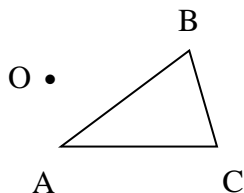


6.1 Dilations
Pre-AP Geometry

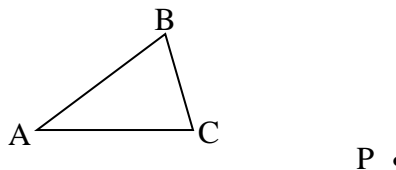
Name _____
 Period _____ Date _____

1-2: Draw the dilation image of $\triangle ABC$ for each center and scale factor.

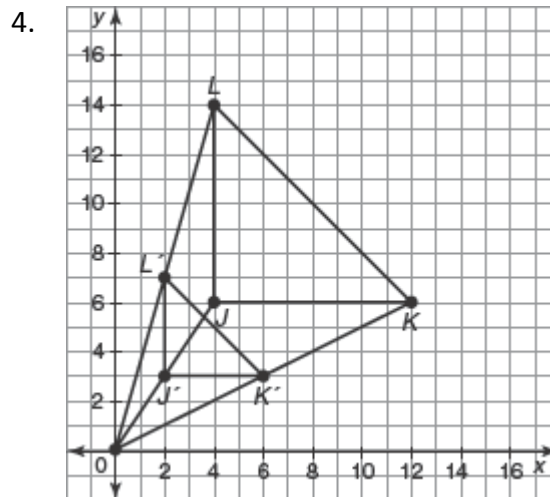
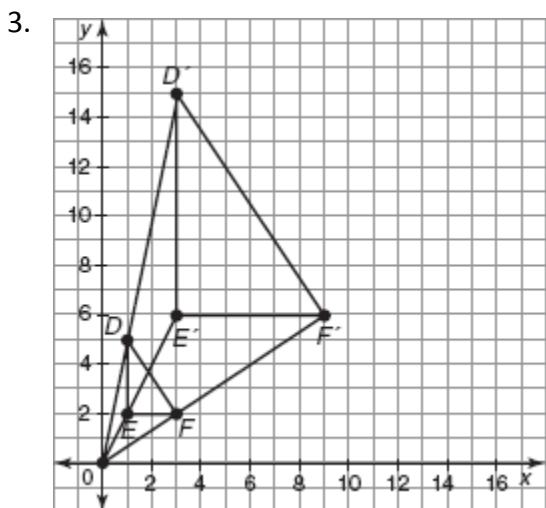
1. A dilation of scale factor 3 with center O



2. A dilation of scale factor $\frac{1}{2}$ with center P



3-4, Given the image and pre-image, determine the scale factor.

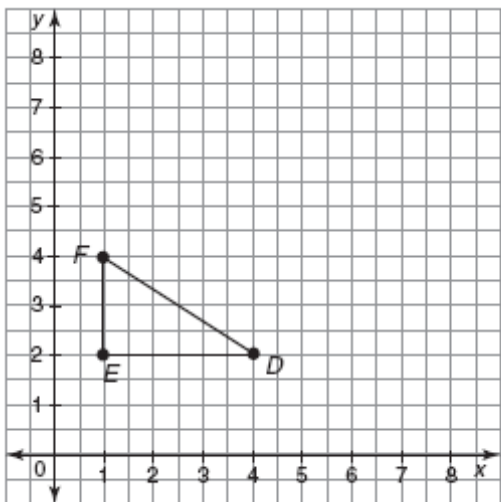


5. $\triangle ABC$ has vertices $A(8, 4)$, $B(14, 16)$, and $C(6, 10)$. What are the vertices of the image after a dilation with a scale factor of $\frac{1}{2}$ using the origin as the center of dilation?

6. The vertices of trapezoid $WXYZ$ are $W(-1, 2)$, $X(-3, -1)$, $Y(5, -1)$, and $Z(3, 2)$. Without drawing the figure, determine the coordinates of the vertices of the image of trapezoid $WXYZ$ dilated using a scale factor of 5 with the center of dilation at the origin. Explain your reasoning.

Given the pre-image and scale factor, graph the image on the coordinate grid.

7. The scale factor is 2 and the center of dilation is the origin.



8. The scale factor is 3 and the center of dilation is the origin.

