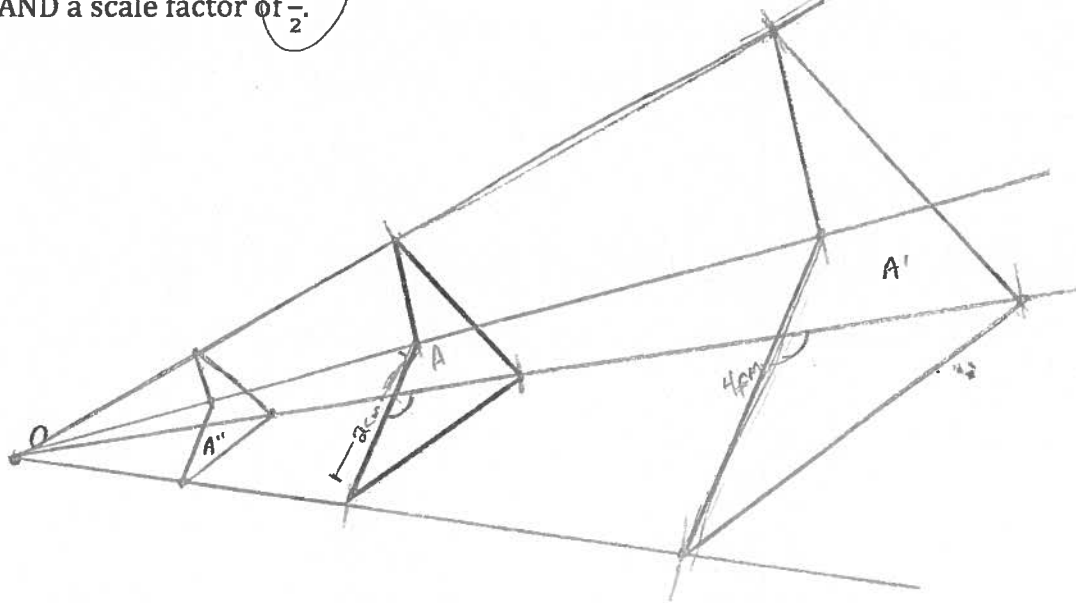
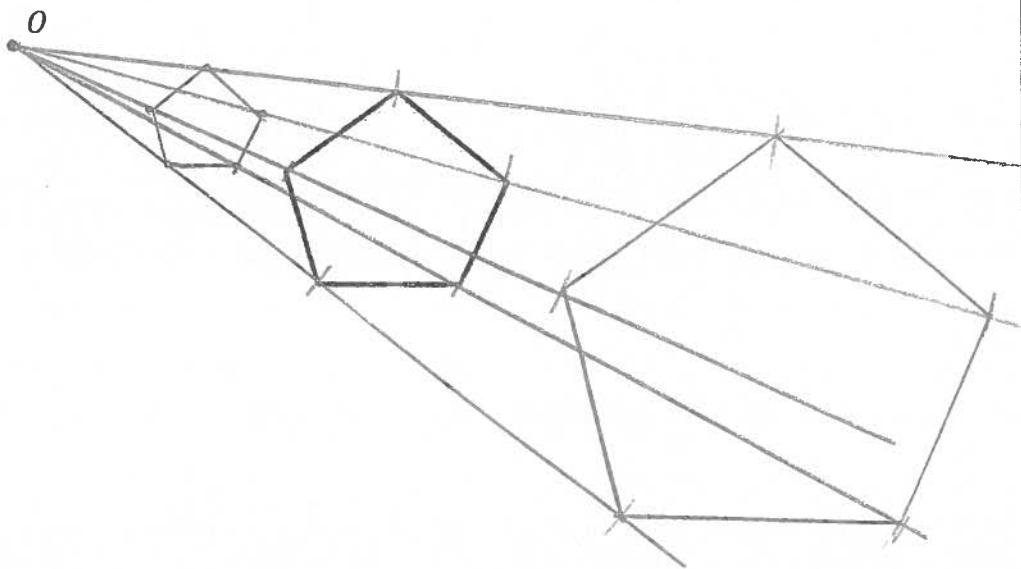


**LEARNING OBJECTIVE:** We will review the properties of dilations and practice performing dilations (G8M3L6)

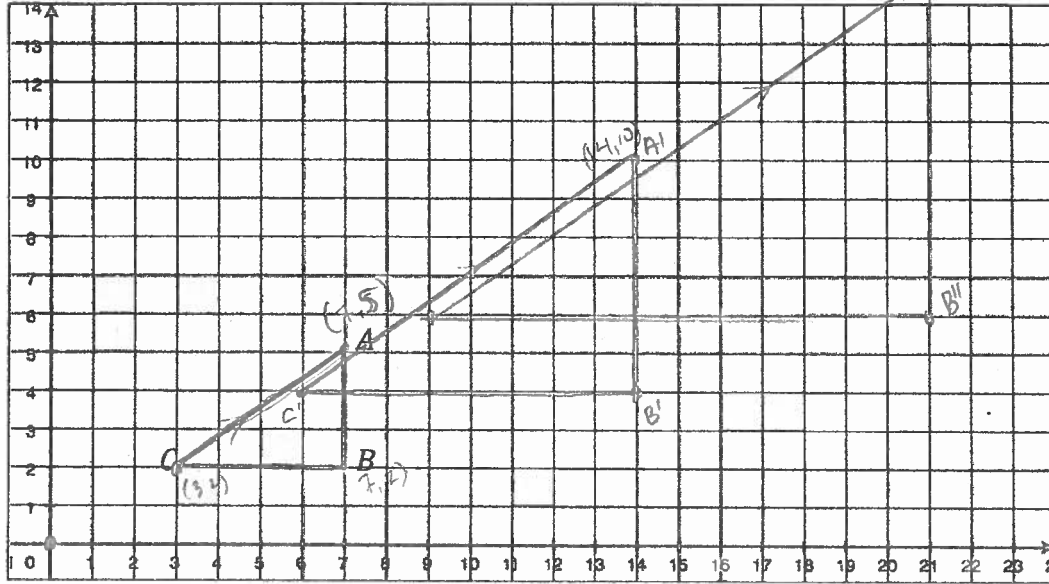
Use a compass and a ruler to dilate the shape below with center  $O$  for a scale factor of 2 AND a scale factor of  $\frac{1}{2}$ .



Use a compass and a ruler to dilate the shape below with center  $O$  for a scale factor of 2 AND a scale factor of  $\frac{1}{2}$ .



Dilate the right triangle with a center at the origin for a scale factor of 2 and 3, Determine the lengths of each side of the every triangle.



$3^2 + 4^2 = AC^2$   
 $9 + 16 = AC^2$

$\overline{AB} = 3$

$\overline{BC} = 4$

$\overline{CA} = 5$

$\overline{A'B'} = 6$

$\overline{B'C'} = 8$

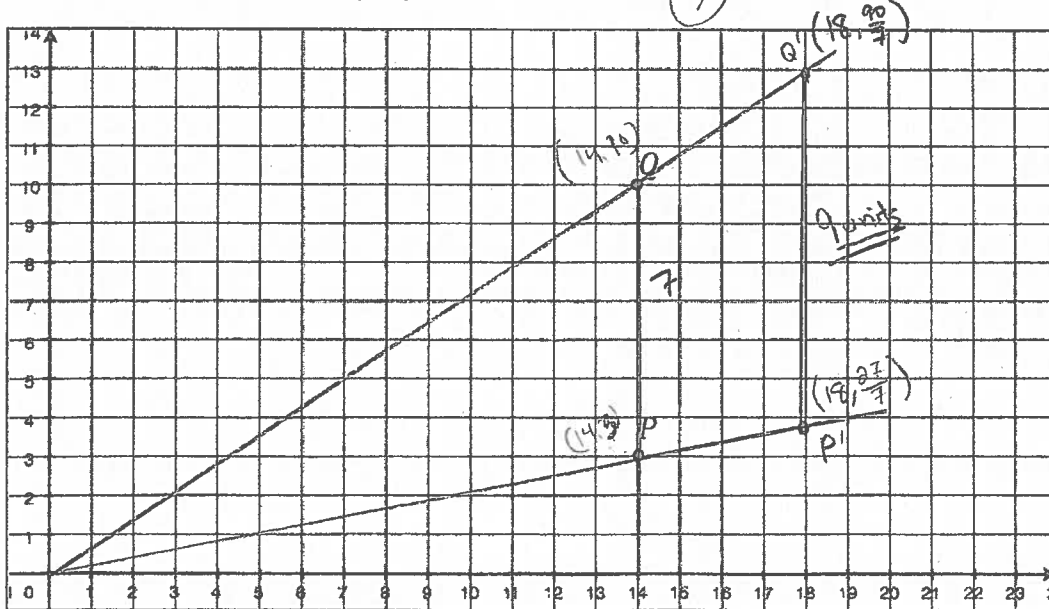
$\overline{C'A'} = 10$

$\overline{A''B''} = 9$

$\overline{B''C''} = 12$

$\overline{C''A''} = 15$

Dilate points from center at (0,0) for a scale factor of  $\frac{9}{7}$ . Find coordinates of P' and Q'



FIND LENGTH OF P'Q'

$Q' = (18, \frac{90}{7})$   
 $P' = (18, \frac{27}{7})$

9 units

NAME: \_\_\_\_\_

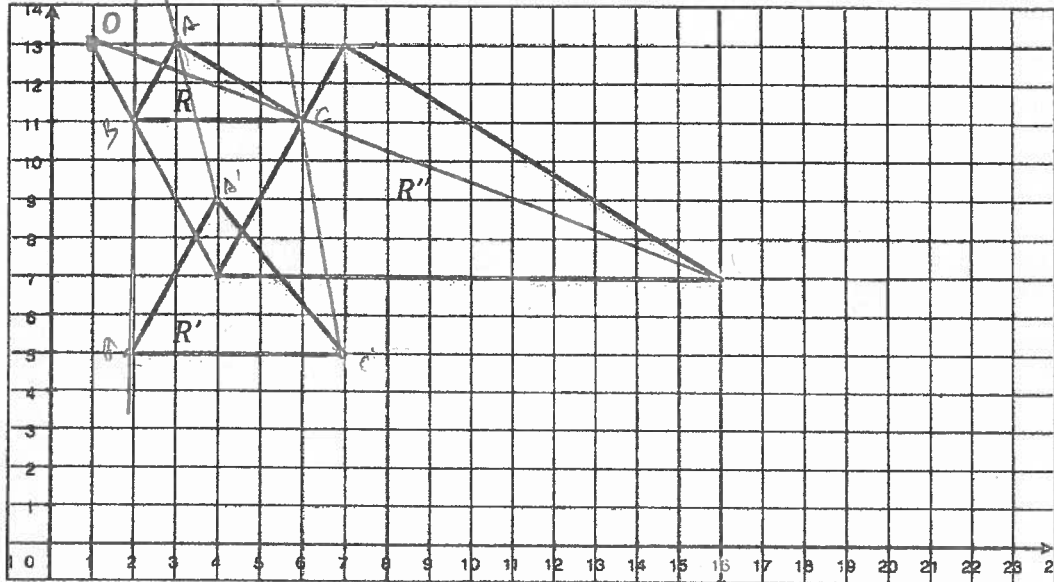
Math \_\_\_\_\_, Period \_\_\_\_\_

Mr. Rogove

Date: \_\_\_\_\_

Describe the possible dilation relationships between shapes  $R$ ,  $R'$ , and  $R''$ . If a dilation, state the point of dilation and the scale factor.

$R \sim R''$   $O(1,13)$



Dilate from center at point  $O$  for a scale factor of 2

