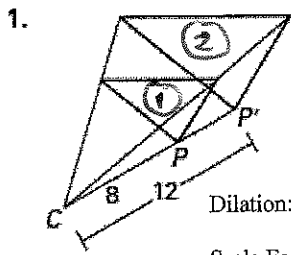


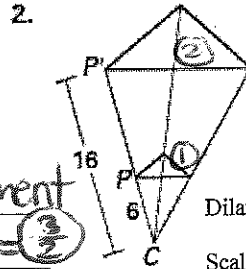
# Practice

Name: Key  
Date: \_\_\_\_\_ Period: \_\_\_\_\_

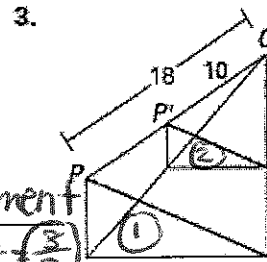
Identify the dilation and find its scale factor.



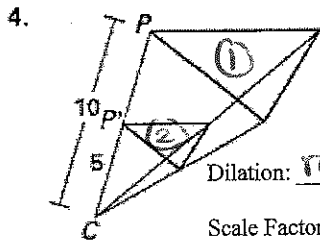
Dilation: enlargement  
Scale Factor:  $K = \frac{12}{8} = \frac{3}{2}$



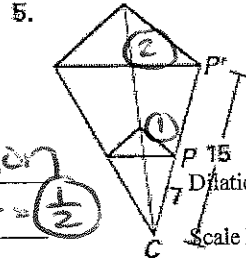
Dilation: enlargement  
Scale Factor:  $K = \frac{16}{6} = \frac{8}{3}$



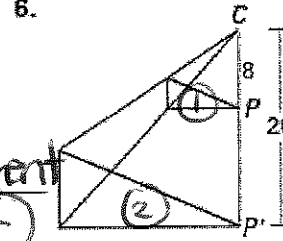
Dilation: reduction  
Scale Factor:  $K = \frac{10}{18} = \frac{5}{9}$



Dilation: reduction  
Scale Factor:  $K = \frac{5}{10} = \frac{1}{2}$



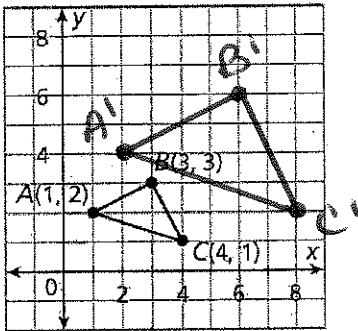
Dilation: enlargement  
Scale Factor:  $K = \frac{15}{7}$



Dilation: enlargement  
Scale Factor:  $K = \frac{20}{8} = \frac{5}{2}$

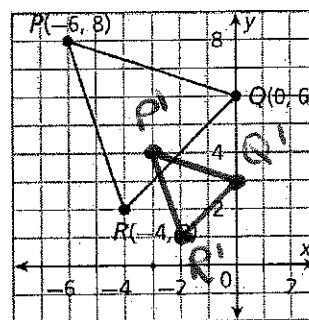
Apply the dilation  $D$  to the polygon with the given vertices. Describe the dilation as an enlargement or a reduction.

10.  $D: (x, y) \rightarrow (2x, 2y)$ ; scale factor = 2  
 $A(1, 2), B(3, 3), C(4, 1)$



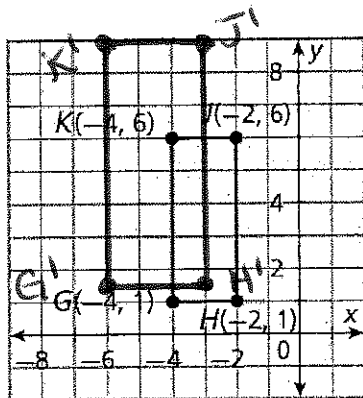
- $A' (2, 4)$   
 $B' (6, 6)$   
 $C' (8, 2)$

11.  $D: (x, y) \rightarrow (\frac{1}{2}x, \frac{1}{2}y)$  scale factor =  $\frac{1}{2}$   
 $P(-6, 8), Q(0, 6), R(-4, 2)$



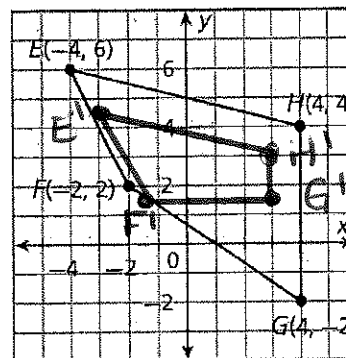
- $P' (-3, 4)$   
 $Q' (0, 3)$   
 $R' (-2, 1)$

12.  $D: (x, y) \rightarrow (1.5x, 1.5y)$  scale factor = 1.5  
 $G(-4, 1), H(-2, 1), J(-2, 6), K(-4, 6)$



- $G' (-6, 1.5)$   
 $H' (-3, 1.5)$   
 $J' (-3, 9)$   
 $K' (-6, 9)$

13.  $D: (x, y) \rightarrow (0.75x, 0.75y)$  scale factor = 0.75  
 $E(-4, 6), F(-2, 2), G(4, -2), H(4, 4)$



- $E' (-3, 4.5)$   
 $F' (-1.5, 1.5)$   
 $G' (3, -1.5)$   
 $H' (3, 3)$