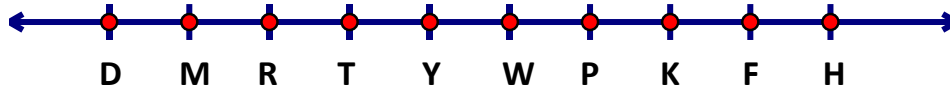


**PROBLEM SET 7-1**

1. Determine the missing point.



- a)  $D_{T,3}(Y) = (\text{_____})$       b)  $D_{R, \frac{1}{2}}(F) = (\text{_____})$       c)  $D_{P,4}(\text{_____}) = (R)$   
 d)  $D_{H,3}(K) = (\text{_____})$       e)  $D_{T,-2}(M) = (\text{_____})$       f)  $D_{F, \frac{1}{8}}(\text{_____}) = (K)$

\*\*Negative means go the opposite direction from the center of dilation

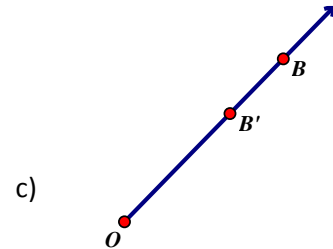
2. Determine whether each of the following is a reduction or an enlargement:

- a) Scale Factor of 2:3  
(image : pre-image)

Reduction or Enlargement

b)  $D_{O, \frac{5}{3}}(G) = G'$

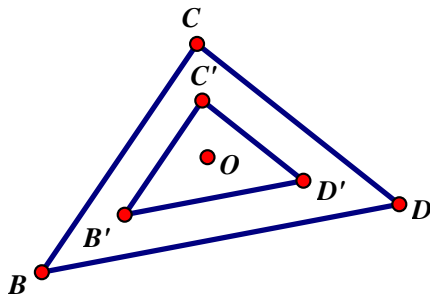
Reduction or Enlargement



c)

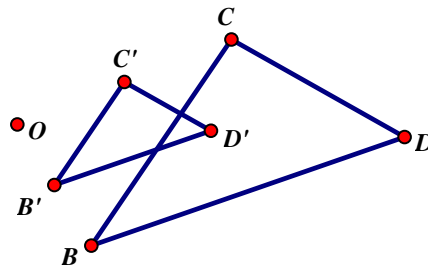
Reduction or Enlargement

d)



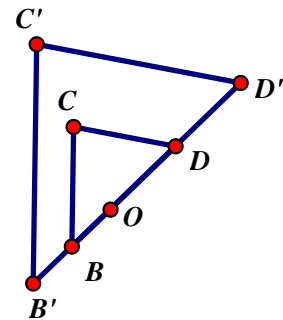
Reduction or Enlargement

e)



Reduction or Enlargement

f)



Reduction or Enlargement

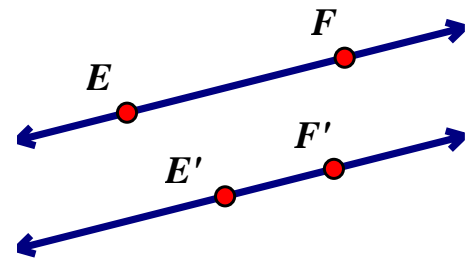
3. Given the dilation of  $\overline{EF}$  onto  $\overline{E'F'}$ ,

- a. Construct the center of dilation O

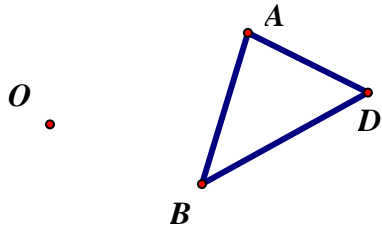
- b. Using your compass, determine the scale factor  $k = \frac{E'F'}{EF} = \text{_____}$

- c. Which of the following statements is false?

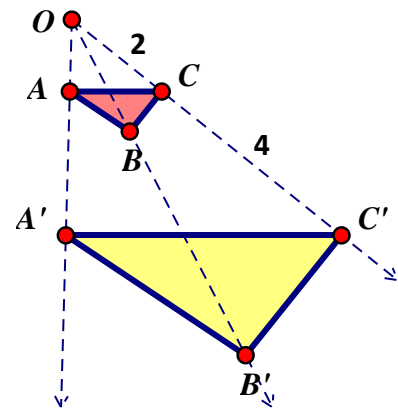
1.  $\overline{EF} \parallel \overline{E'F'}$
2.  $m\angle EFO = 2(m\angle E'F'O')$
3.  $E'F' = \frac{1}{2}(EF)$
4. E and F remain collinear



4. Construct the dilation centered at  $O$  of triangle  $ABD$  with  $k=4$ . (Extra credit: dilate again with  $k=2.5$ )



5. Tiffany sees this given dilation and claims that the scale factor is 2 because 4 is twice as big as 2. Is this a scale factor of 2? Explain.



1. Construct  $D_{O, \frac{1}{2}}(\triangle ADB)$

(Extra credit: construct again with  $k=1/4$ )

