

**1. Circle whether the following situations are REDUCTIONS OR ENLARGEMENTS.**

a) Scale Factor of 7:1  
(image : pre-image)

Reduction or Enlargement

b)  $D_{O,3}(H) = H'$

Reduction or Enlargement



Reduction or Enlargement

d)  $D_{O,1.75}(A) = A'$

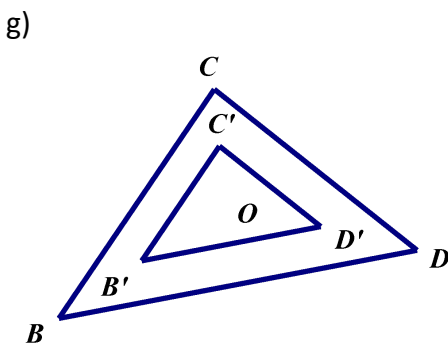
Reduction or Enlargement

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

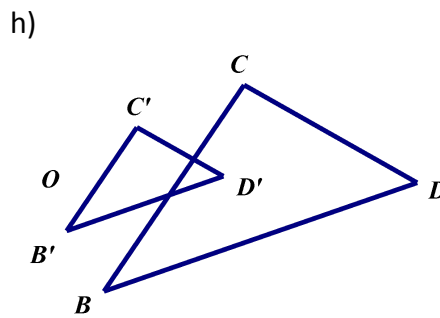
Reduction or Enlargement

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

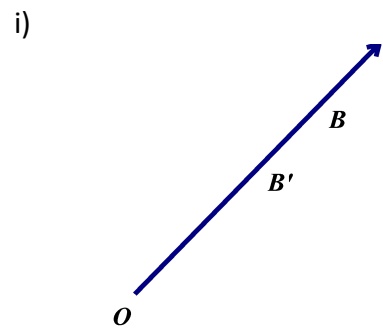
Reduction or Enlargement



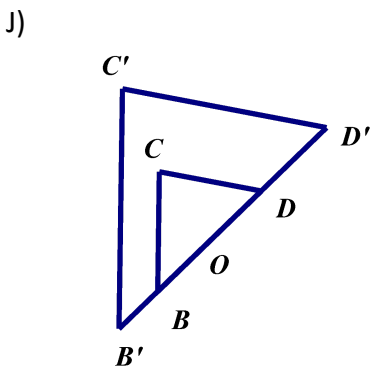
Reduction or Enlargement



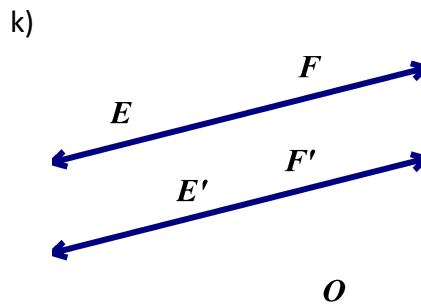
Reduction or Enlargement



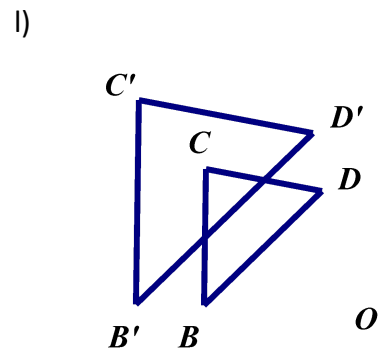
Reduction or Enlargement



Reduction or Enlargement



Reduction or Enlargement



Reduction or Enlargement

**2. Determine the missing point.**



a)  $D_{O,3}(B) = (\text{_____})$

b)  $D_{O,-2}(H) = (\text{_____})$

c)  $D_{G,-2}(H) = (\text{_____})$

d)  $D_{E,3}(C) = (\text{_____})$

e)  $D_{H,4}(\text{_____}) = (F)$

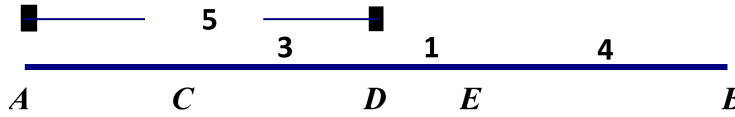
f)  $D_{H,-9}(\text{_____}) = (E)$

g)  $D_{H,3}(\text{---}) = (C)$

h)  $D_{C,2.5}(F) = (\text{---})$

i)  $D_{G,\frac{7}{5}}(F) = (\text{---})$

3. Determine the ratio. (Reduce the ratio)



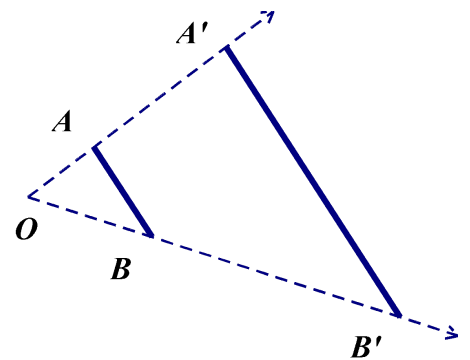
- a) CD : DE    \_\_\_\_\_ : \_\_\_\_\_    b) EB : BD    \_\_\_\_\_ : \_\_\_\_\_    c) CD : DA    \_\_\_\_\_ : \_\_\_\_\_  
 d) AC : CD    \_\_\_\_\_ : \_\_\_\_\_    e) CE : CD    \_\_\_\_\_ : \_\_\_\_\_    f) AC : AB    \_\_\_\_\_ : \_\_\_\_\_

4. Answer the following questions about the dilation, centered at O.

a) Is this an enlargement or a reduction? \_\_\_\_\_  
 Explain how you determined your answer.

b) What scale factor do you think this is? \_\_\_\_\_  
 Explain how you determined your answer.

c) What angle is the same size as  $\angle OBA$ ? \_\_\_\_\_  
 Explain how you determined your answer.



5. Answer the following questions about the dilation centered at O with a scale factor of 3.

OA = 3, OB = 5 and AB = 4

- a)  $A'B' =$  \_\_\_\_\_  
 b)  $OB' =$  \_\_\_\_\_  
 c)  $OA' =$  \_\_\_\_\_  
 d)  $AA' =$  \_\_\_\_\_ (be careful)  
 e)  $BB' =$  \_\_\_\_\_ (be careful)  
 f) What is the ratio of OA:AA'? \_\_\_\_\_

