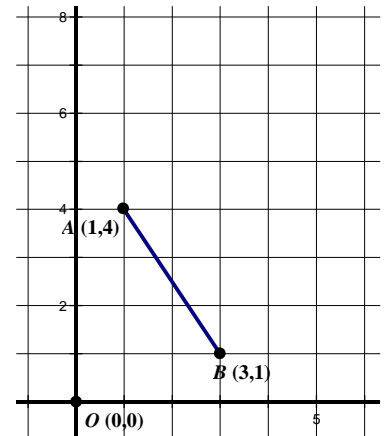**1.   Using the graph to the right, dilate the line using a scale factor of n=2 and center at O.**

a.(multiply each coordinate of A by 2)	b. (multiply each coordinate of B by 2)

c) What do you think the relationship is between OA' and OA?

d) What is the relationship between OB' and OB?

2.   Circle whether the following situations are REDUCTIONS OR ENLARGEMENTS.

a) Scale Factor of 1:7
(pre-image : image)
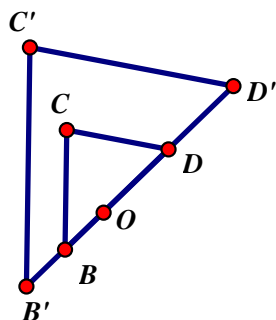
b) $D_{O,3}(H)=H'$

c)

Reduction   or   Enlargement   Reduction   or   Enlargement   Reduction   or   Enlargement
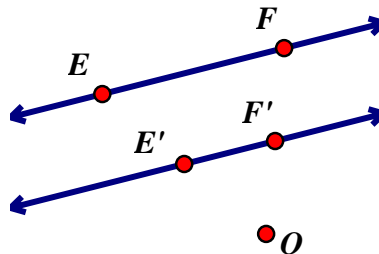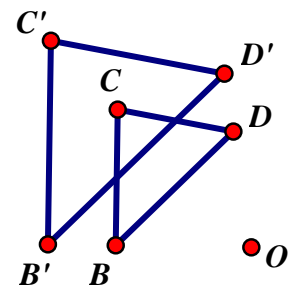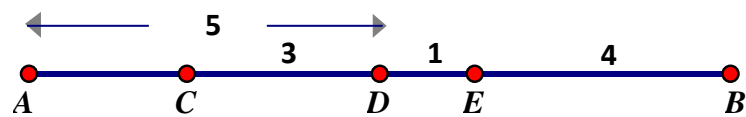
d) Reduction   or   Enlargement   e) Reduction   or   Enlargement   f) Reduction   or   Enlargement

3. Determine the ratio. (Reduce the ratio)

5

3   1   4

A   C   D   E   B

a) AC : CD   _____ : _____   b) CE : CD   _____ : _____   c) 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 ∠OBA?   _____
Explain how you determined your answer.

A'

A

O

B

B'