The following exercise is called a ranking task. You will be asked to rank the objects in the problem from greatest to least, and specify which, if any, are equal, or if they are all equal.

Here is an example of how to do a ranking task problem:
Rank the following areas from greatest to least. Clearly specify which areas are equal. Explain your ranking clearly.

A. circle, radius = 8cm
B. square, length = 15 cm
C. triangle, height 20 cm, width 20 cm
D. rectangle, height 10cm, length 20 cm

Greatest 1. __B__ 2. __C =___ 3. __D___ 4. ___A__

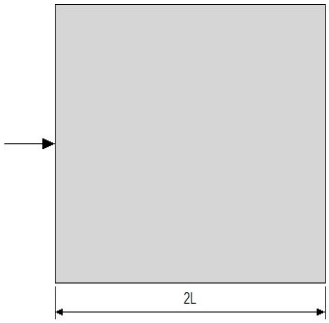
They are all equal: ____

In the example, B has the greatest area (225 cm^2). C and D both have areas of 200 cm^2, and A has an area of approximately 198 cm^2.

Name:_____ Section #:_____

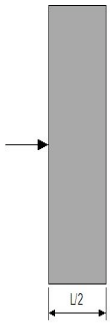
The following spectroscopy samples are from the same stock solution, and all produce clear, visible peaks at a wavelength of 400 nm. Rank the samples from the highest absorbance to the lowest absorbance based on the information provided. The images are side views, the light enters the sample from the left, and the sensor is on the right.

A.



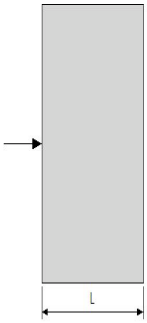
Concentration: C/2
Length: 2L

B.



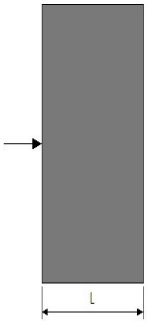
Concentration: C
Length: L/2

C.



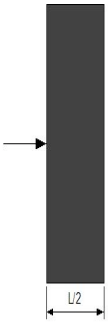
Concentration: C/2
Length: L

D.



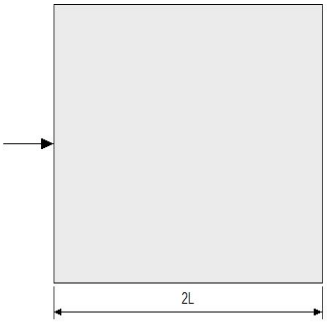
Concentration: 2C
Length: L

E.



Concentration: 4C
Length: L/2

F.



Concentration: C/4
Length: 2L

Highest Absorbance: 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ Lowest Absorbance or They are all equal: _____

Explain your reasoning: