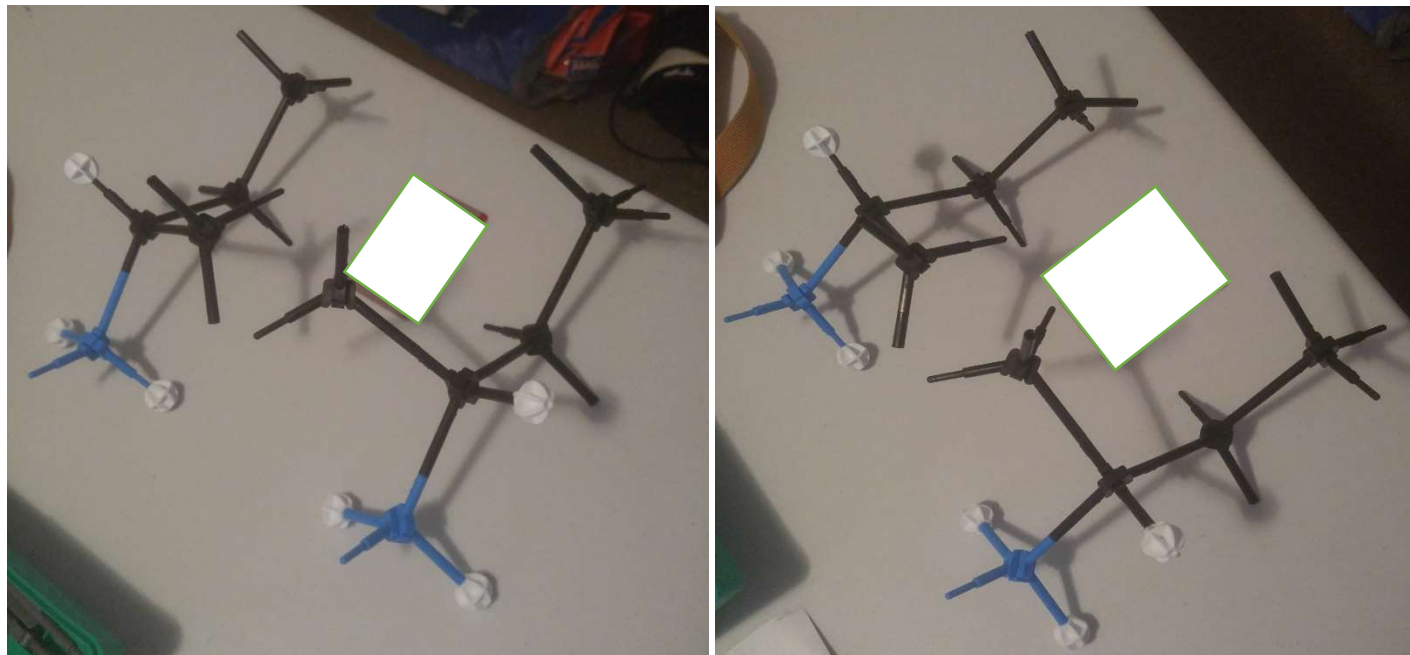


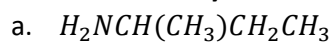
CHM 1321 Stereochemistry and Molecular Models Assignment:

Part A:

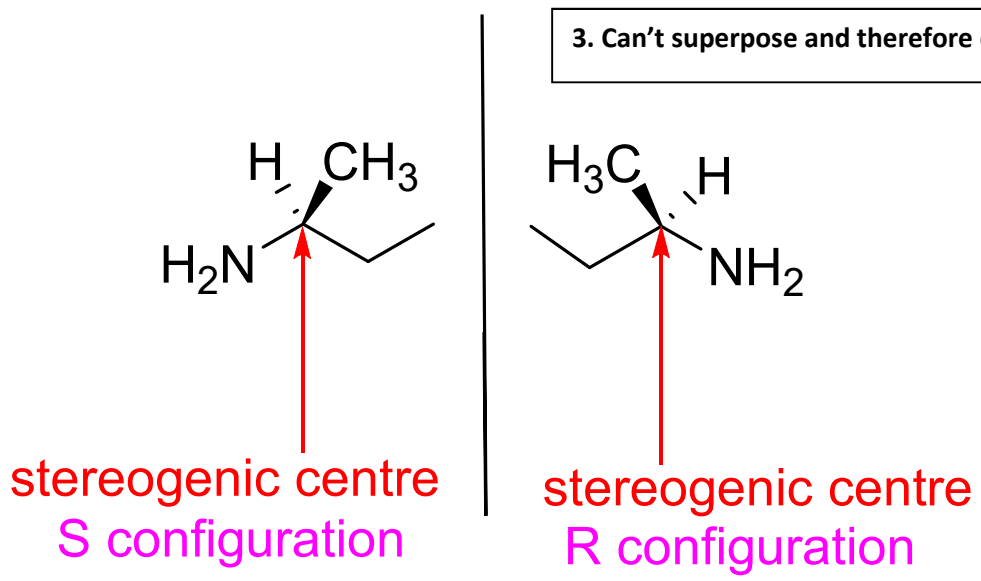
1. Model of molecule A and its mirror image:

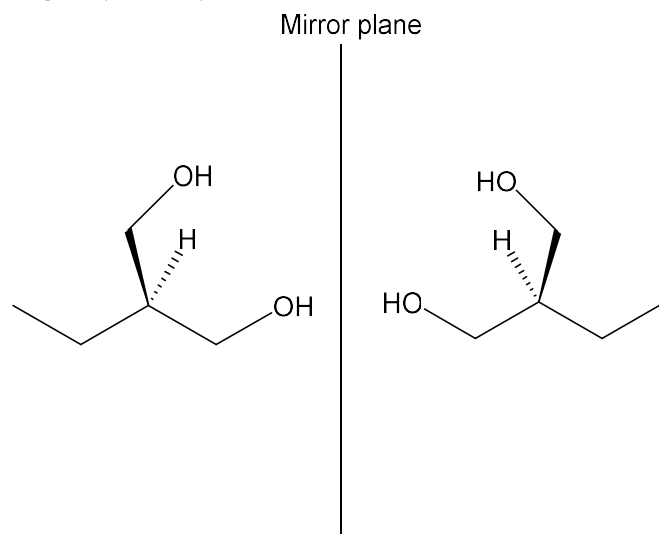
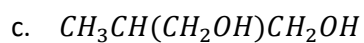
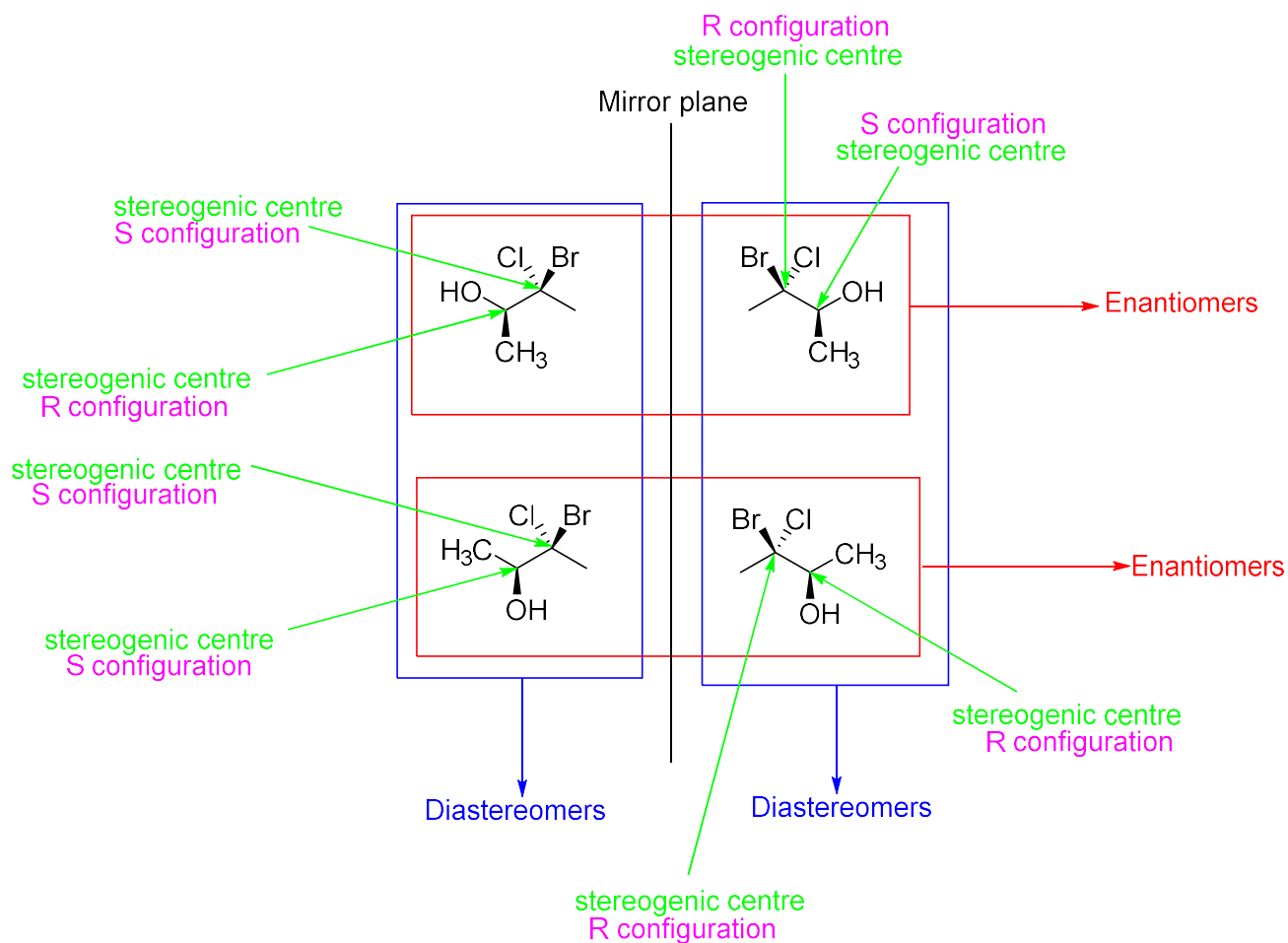
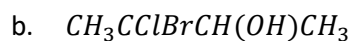


2. Stereochemical analysis:



Mirror Plane

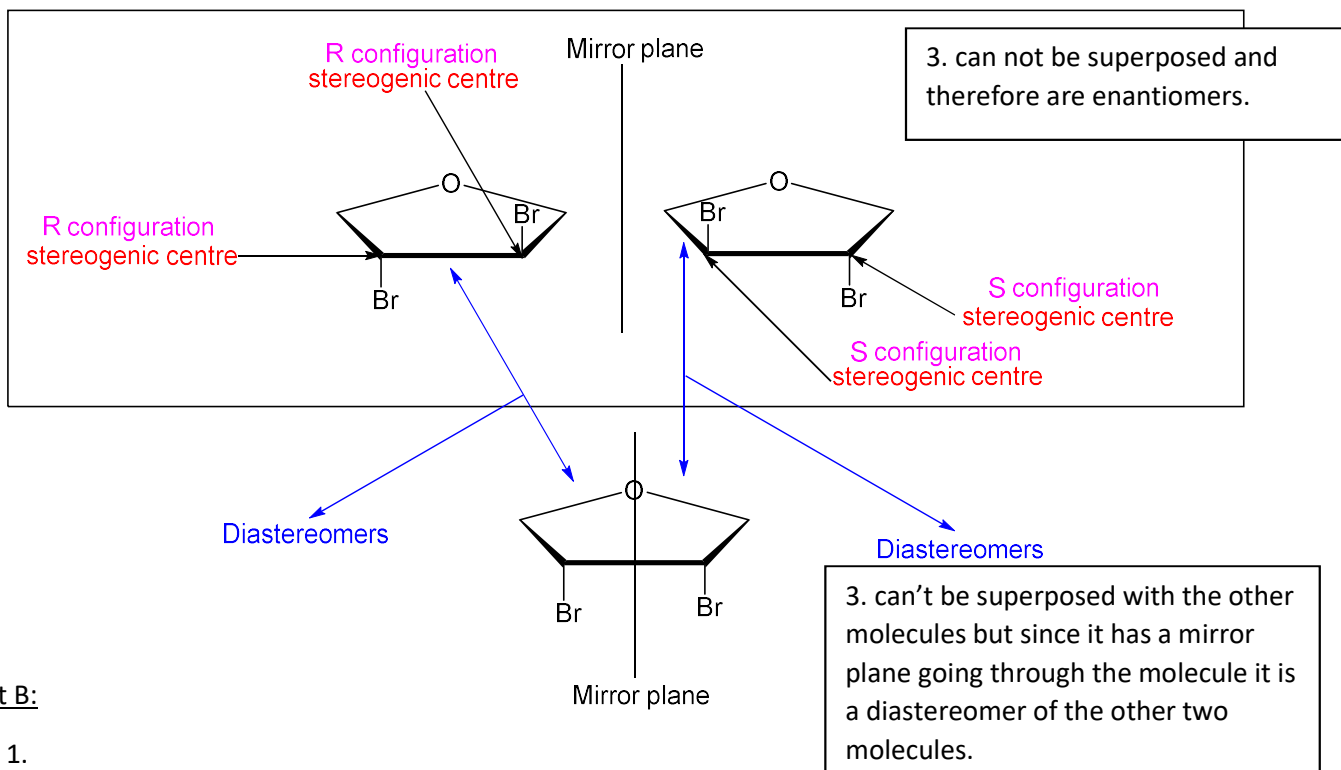




3. Can be superposed and therefore not enantiomers.

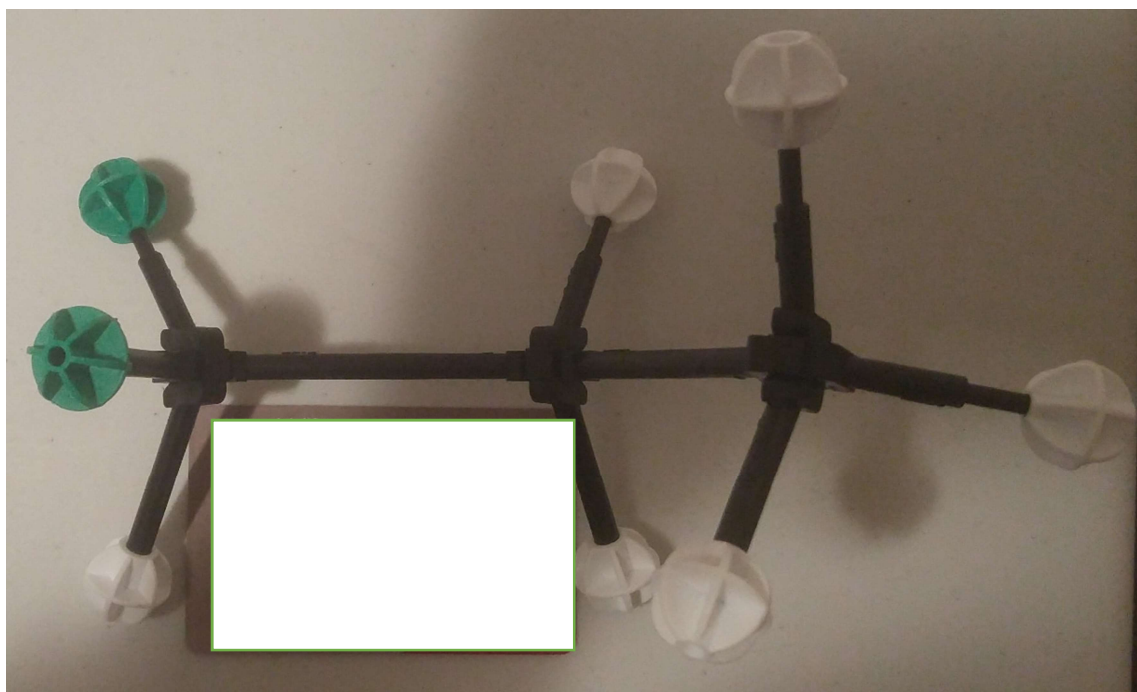
4. The molecule does not have any stereogenic centre and therefore those are also not diastereomers, but they are the same molecule.

d. 3,4 - Bromooxacyclopentane

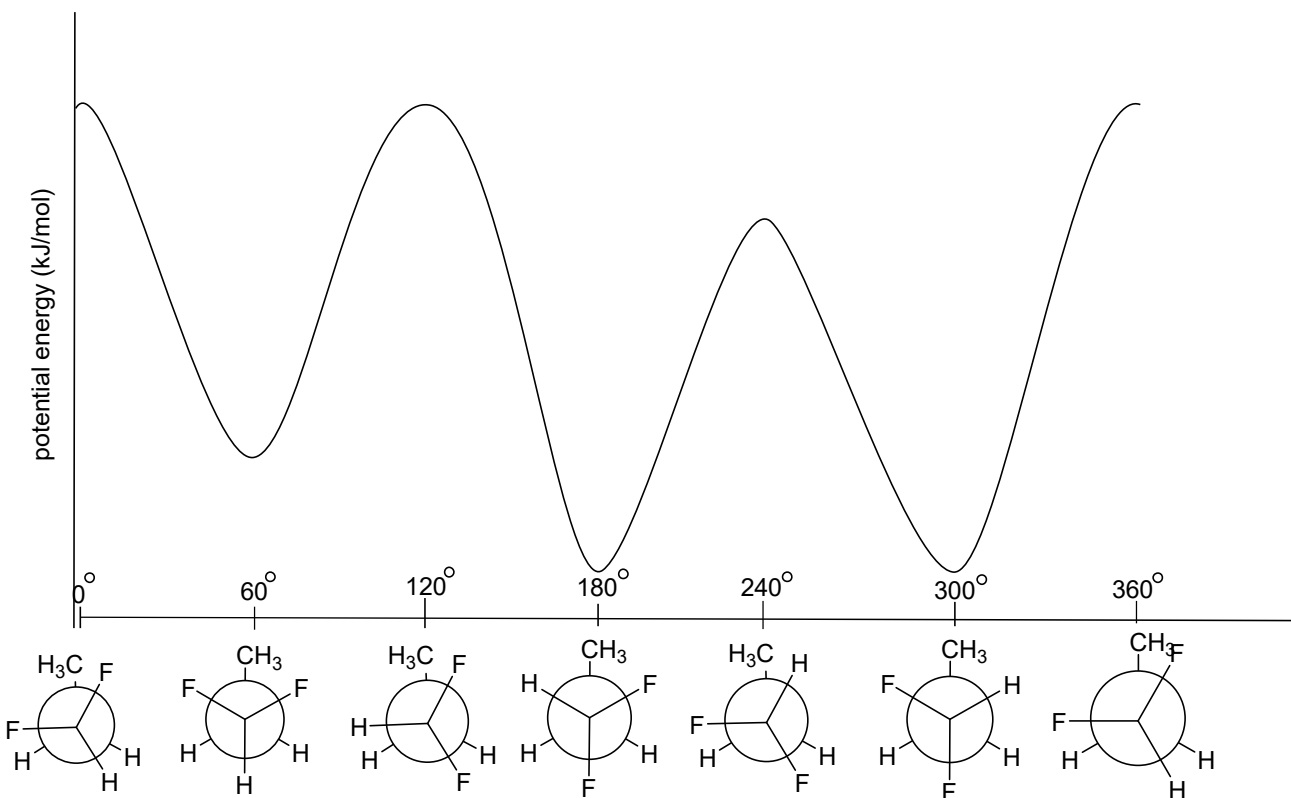


Part B:

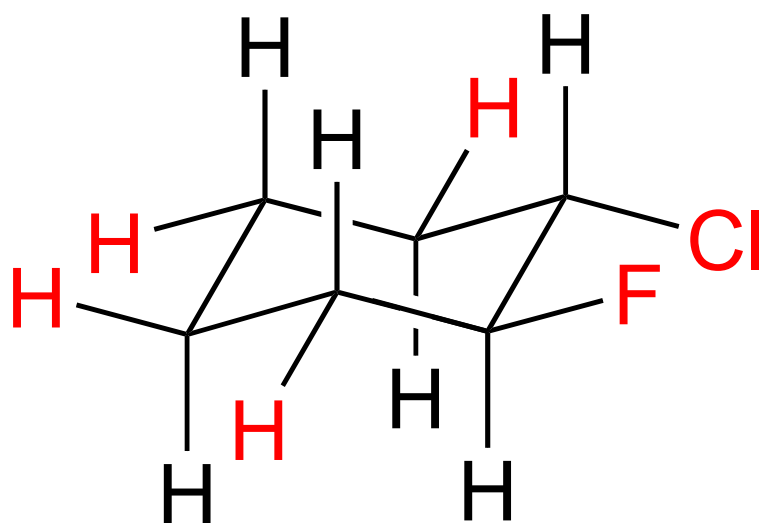
1.



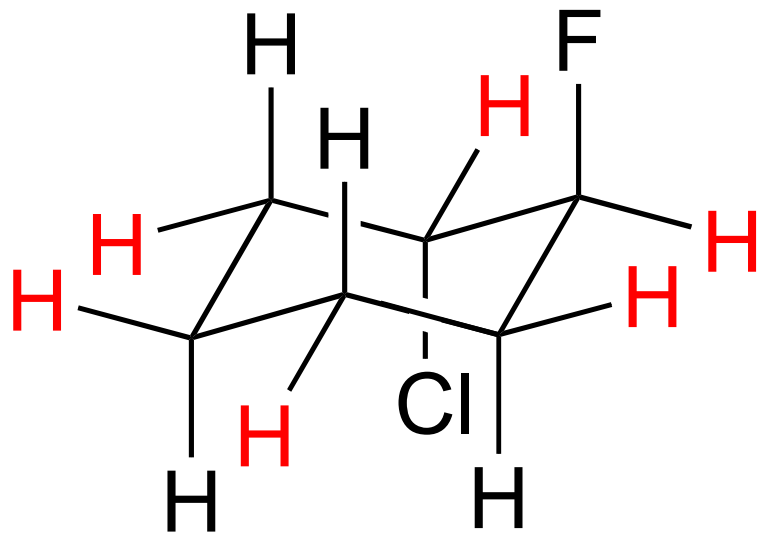
2.



Part c:



Bigger substituents are at equatorial position and therefore this form is more stable.



In this form the bigger substituents are at axial position and therefore this conformation is less stable.