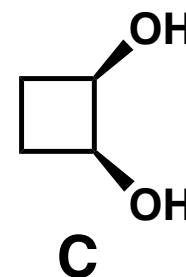
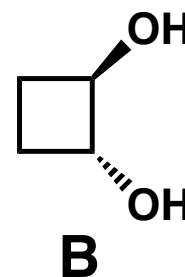
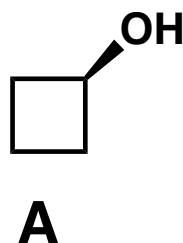


Discussion Problems

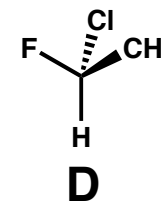
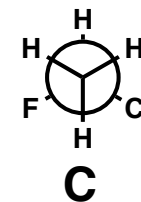
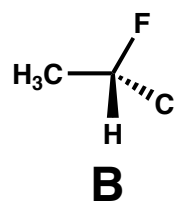
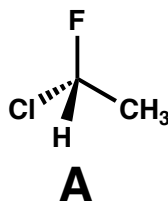
(1) Which of these molecules are chiral?

- A
- B
- C
- B and C
- all of them



(2) Which pairs of molecules have the same configuration?

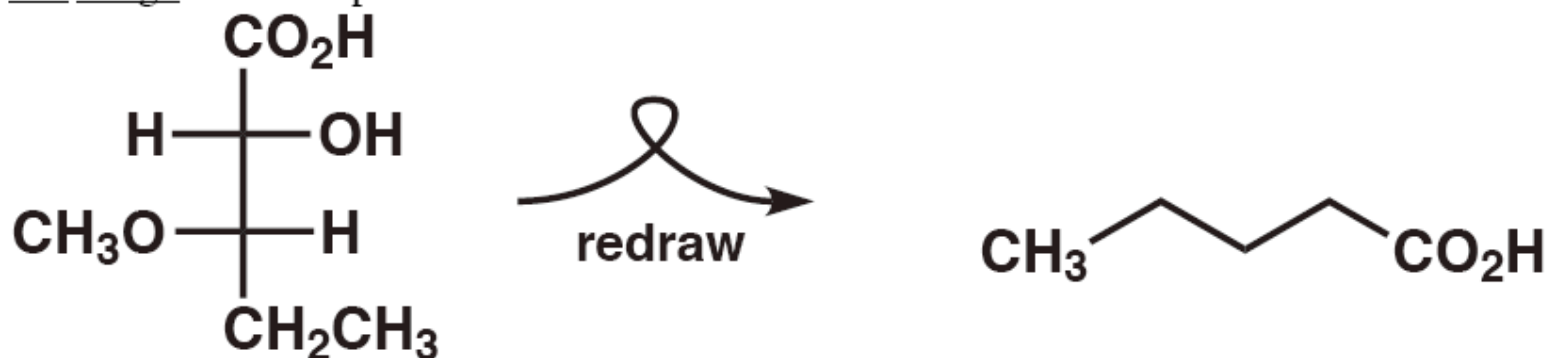
- A/B and C/D
- A/C and B/D
- A/D and B/C
- all four are the same



Discussion Problems

Exam II, Fall 03

11) [8 pts.] Convert the Fischer projection to a perspective drawing of the same configuration, and assign *R* *S* descriptors to each stereocenter.



12) [4 pts.] Finish drawing the enantiomer of the structure shown.

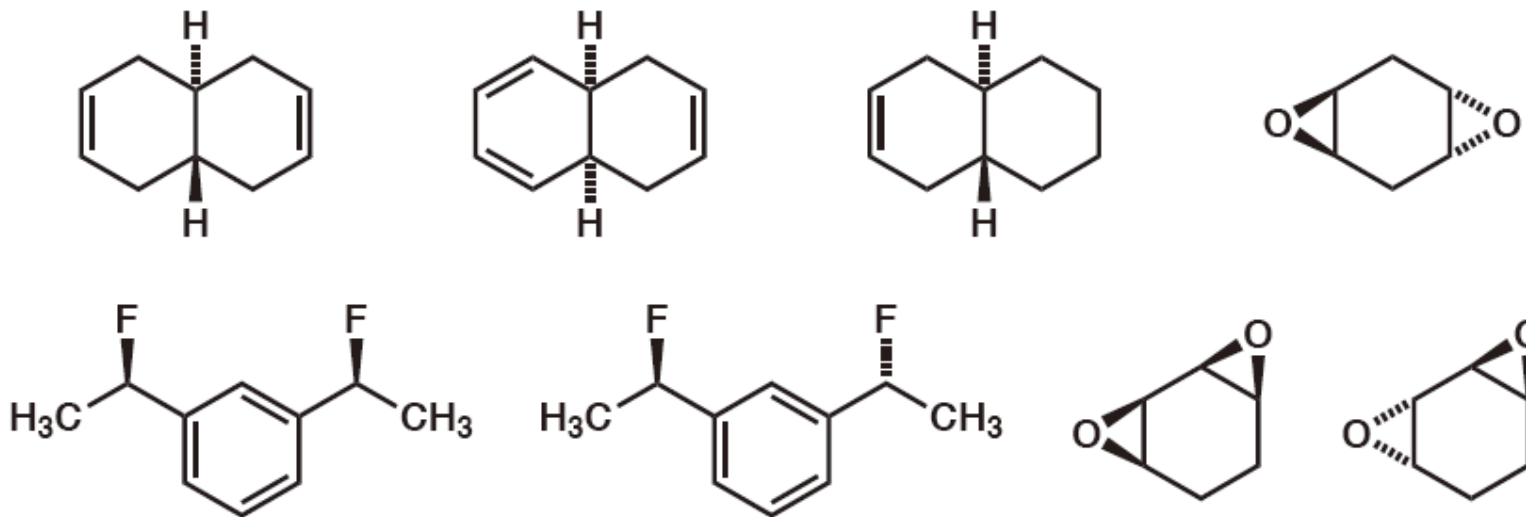


Discussion Problems

13) [8 pts.] Draw two diastereomers of the Newman projection shown below. Represent your diastereomers as Fischer projections.



14) [8 pts.] Circle all the chiral molecules.



Discussion Problem:

The Intricacies of Inputting Stereochemistry into ACE

Input these structures into ACE, exactly as they are shown below. For each structure, which configuration, (R) or (S), does ACE assign? Which drawing(s) is (are) the best way(s) to represent the (R) configuration? Which drawing(s) has (have) a configuration that ACE cannot assign? Which drawings should be avoided (cross them off and never submit your answers this way)? **Define a set of drawing conventions that are reliable and unambiguous.** Adopt these conventions whenever you use ACE!

