Fall 2007 Homework #2

due: 10 a.m. Mon. Sep. 10th

Note: please do not fax HW unless you are detained far from campus

1. (8 points) Write the correct IUPAC name for each of the following:

2. (8 points) Draw the structure corresponding to the name given. Please show all stereochemistry clearly.

- a. (3R)-(6E)-6-octen-3-ol
- c. (2R)-2,3-dimethylbutyl pentanoate
- b. 4,4-dimethylcyclohexanol
- d. 4-methoxy-2-butanone

3. (8 points) For each pair, indicate whether they are diastereomers, enantiomers or the same.

4. (6 points) Draw a detailed arrow-pushing mechanism (other side) for the transformation of A to B.

$$\begin{array}{c|c} & \text{SCH}_3 \\ & & \\ & & \\ & & \\ \text{Br} & \mathbf{A} & \Delta \\ & & \mathbf{B} \\ \end{array} + \text{CH}_3\text{-SF}$$