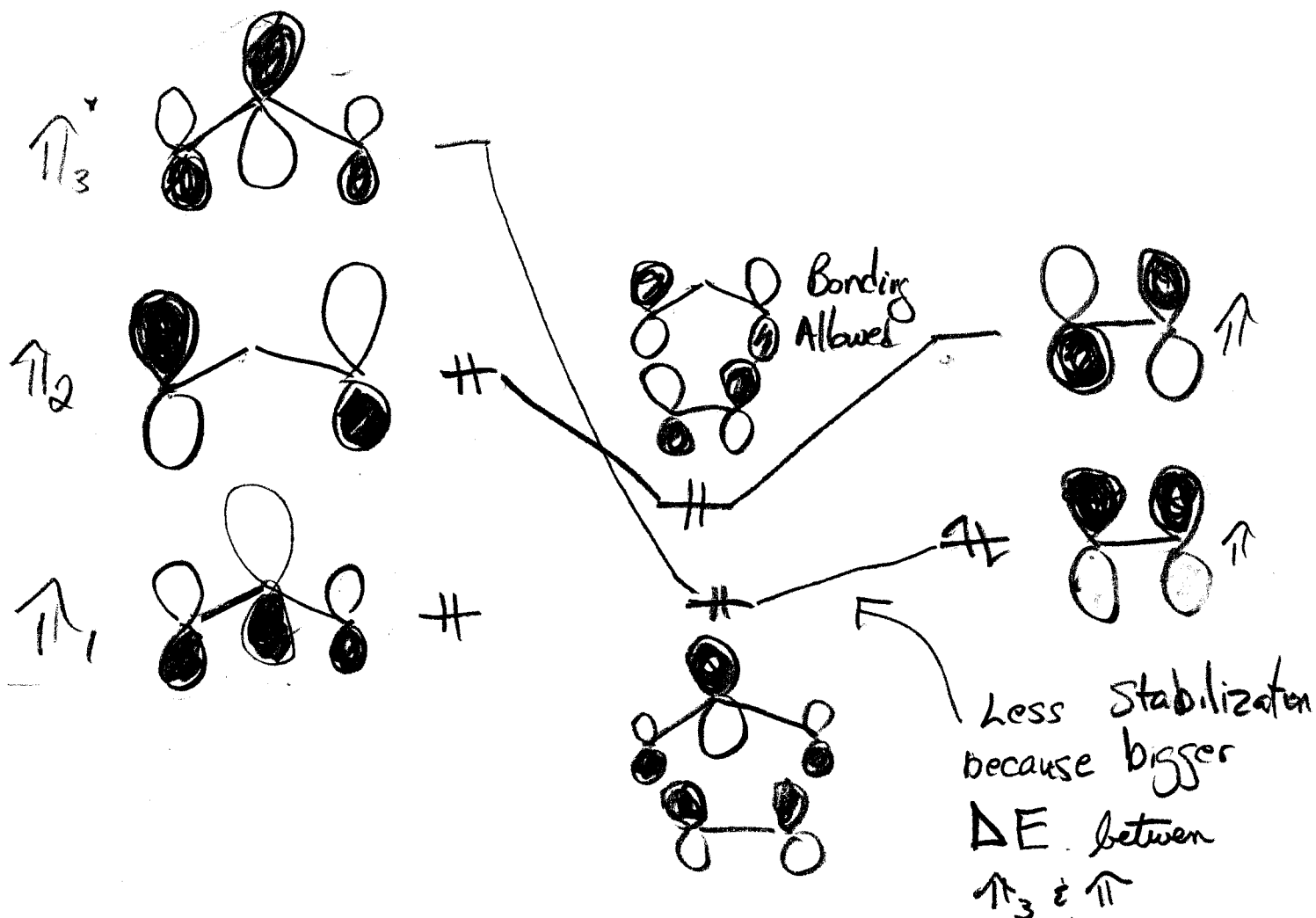
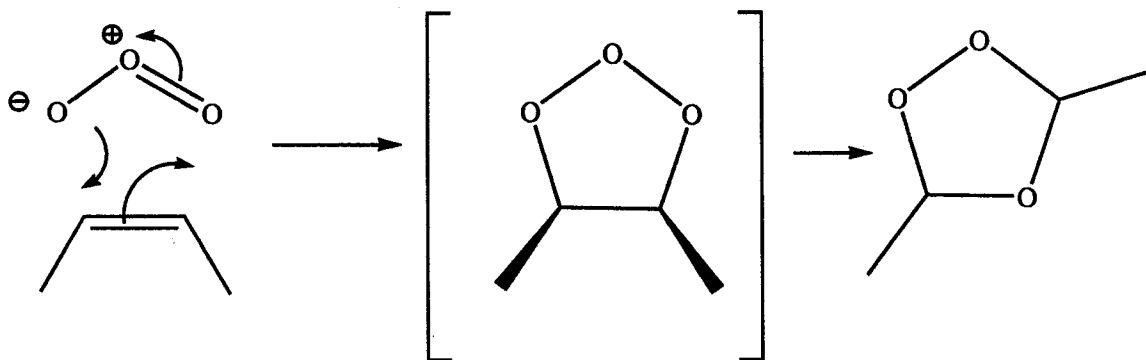
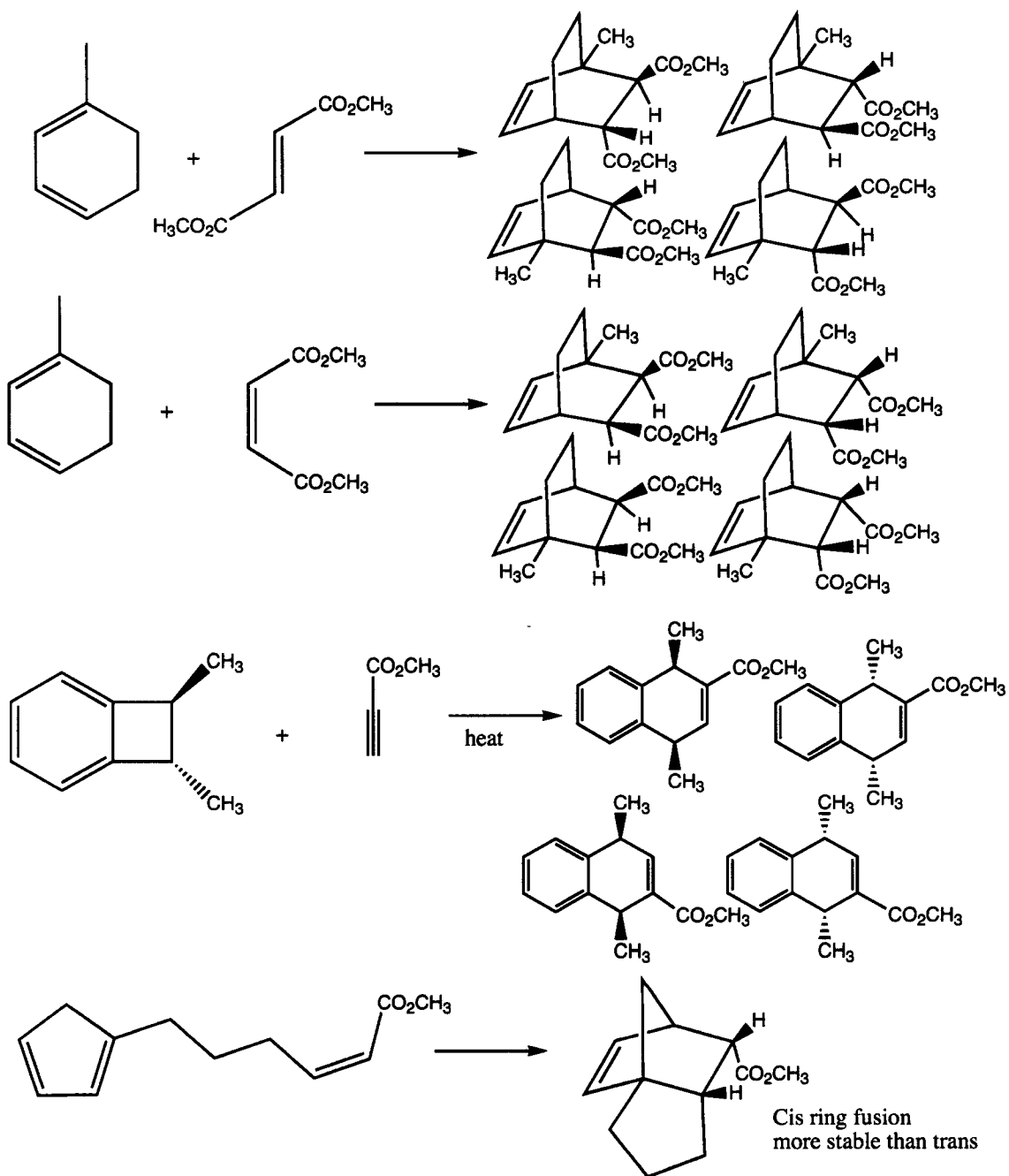


Problem Set 5 5.13 For practice only.

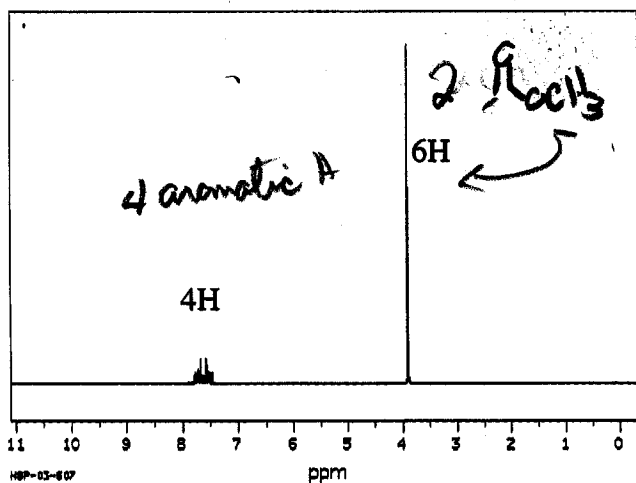
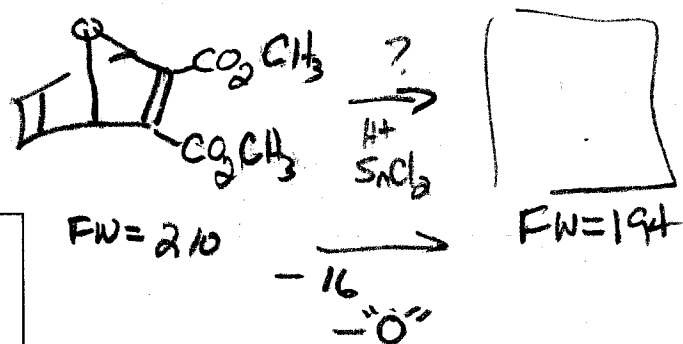
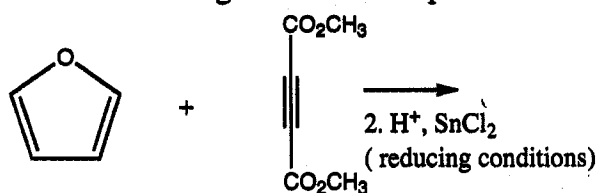
1. Oxone (O_3) has frontier molecular orbitals (the highest energy ones that matter) just like those of those of allyl. As you know ozone undergoes a facile addition to double bonds as shown, which spontaneously rearrange to the ozonide. Show by using an orbital correlation diagram that that initial addition of ozone to a double bond is allowed.



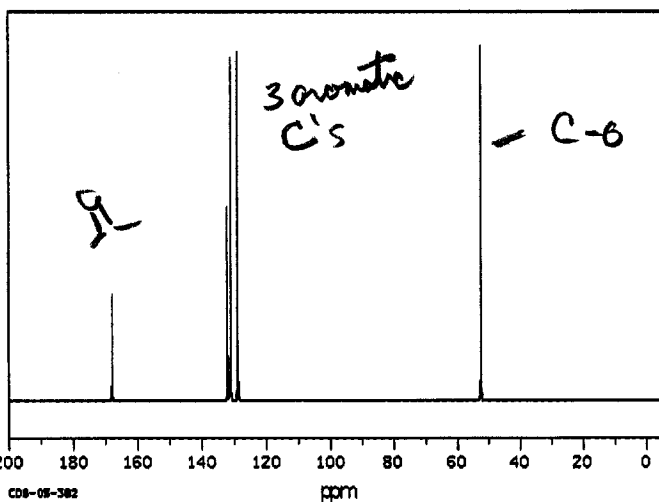
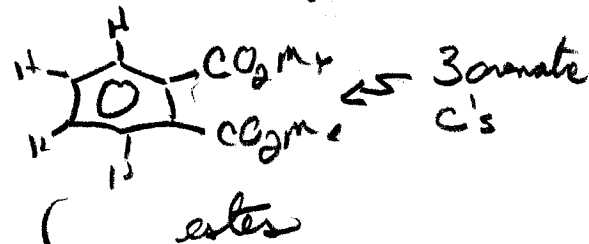
2. Predict the products of the following reactions and the specific stereoisomers.



3. The following reaction sequence was performed to give a product (F. W. = 194.2) that has the following NMR and IR spectra.



4 aromatic H and loss of "O" suggest



FW-194

