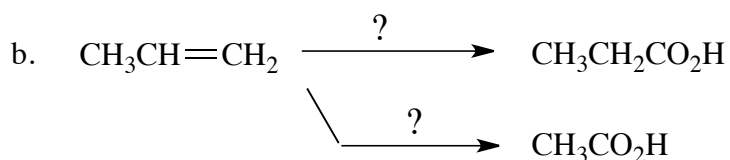
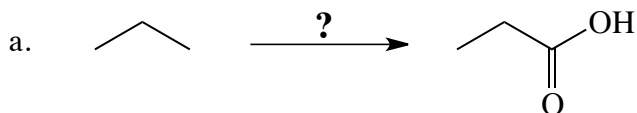
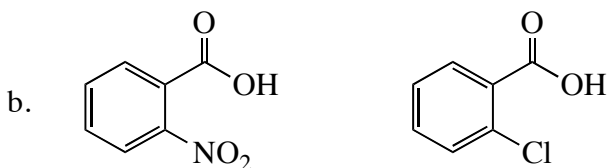


51C Practice Problems 3
Spring, 2019

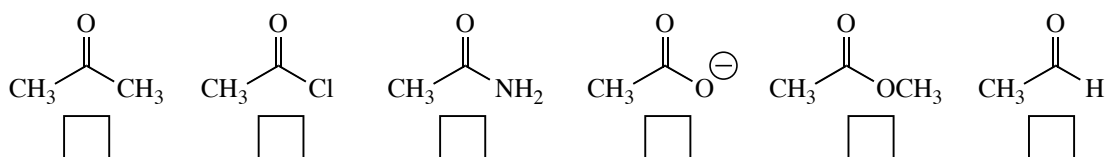
1. Provide a synthesis of the following carboxylic acids from the given starting materials:



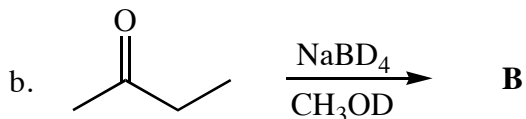
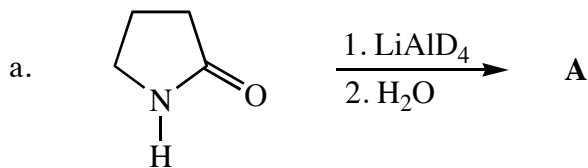
2. Compare the following acidities. Which carboxylic acid would you expect to be the most acidic in each pair? Give a *brief* explanation of your reasoning.



3. Rank in order of decreasing electrophilicity (1 = best electrophile):



4. Predict the products for the following reactions and show a mechanism for their formation.



5. Predict the products from the following reactions. Show the mechanism for reaction of LiAlH_4 with the ester:

