

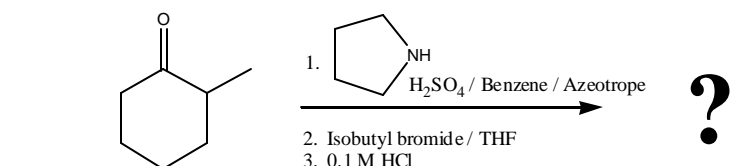
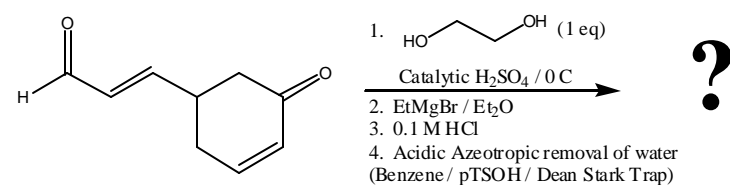
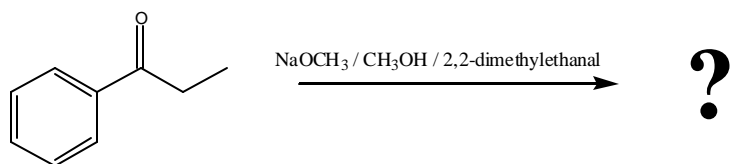
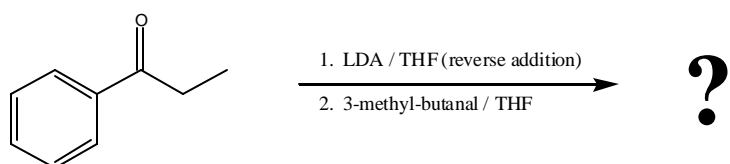
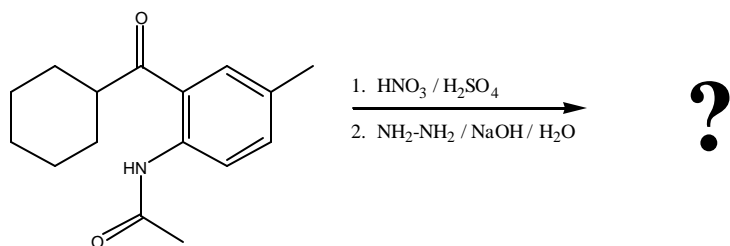
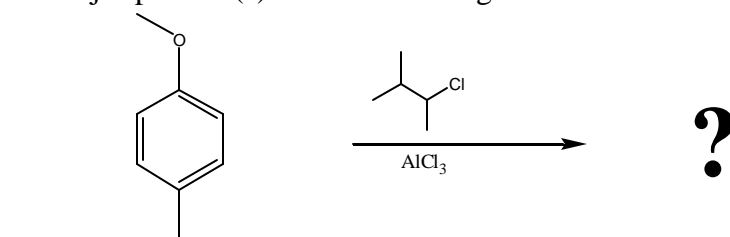
# Organic Chemistry: CHEM 231B

Whittier College

Spring 2004

## Practice Problem Set for Test #4

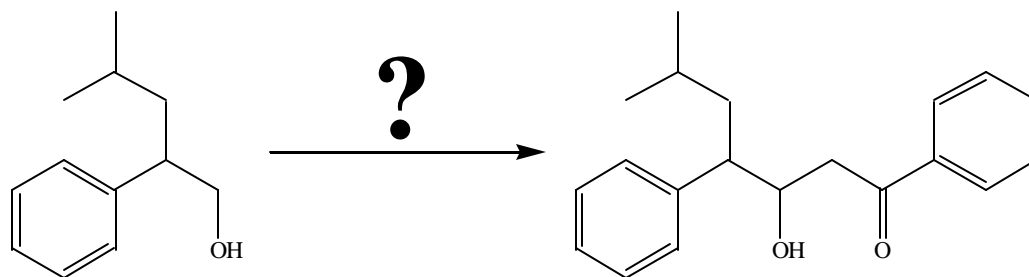
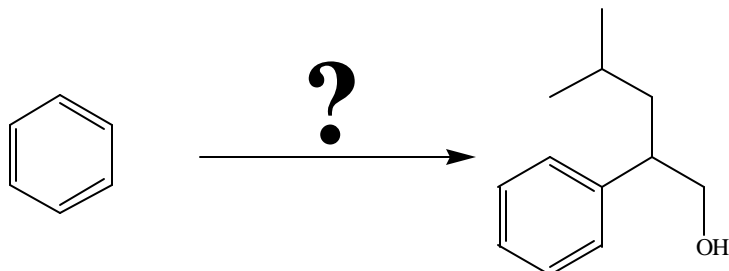
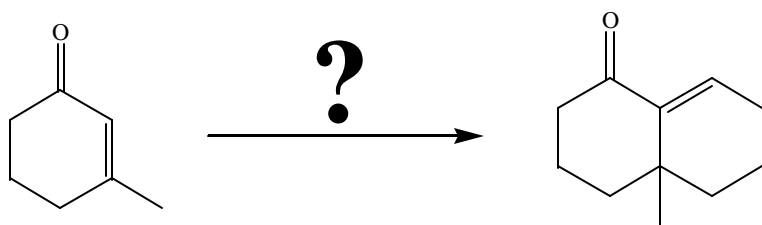
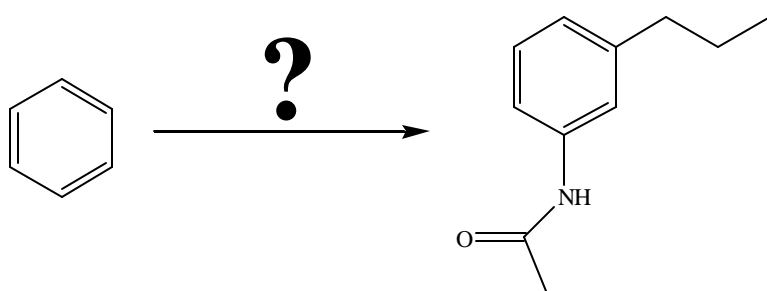
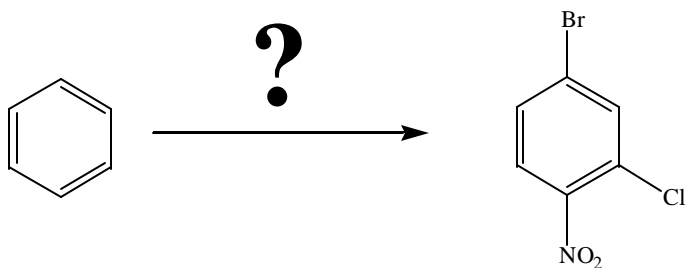
1. Predict the major product(s) for the following reactions:



1a. What are the identities of all of the major products?

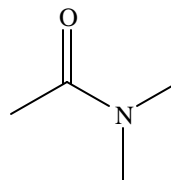
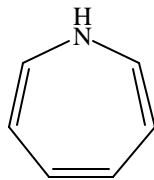
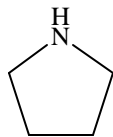
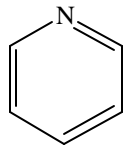
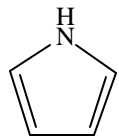
1b. Understanding reaction mechanisms is important for this test. As a result, you might want to draw all of the mechanisms for the reactions.

2. Provide the required reagents for the following transformations. More than one synthetic step may be required.



3. Do question 50 from chapter 16.

4. Consider the following molecules:



- 4a. Identify the most basic atom in each molecule
- 4b. Rank the molecules in order from most basic to least basic
- 4c. Explain your answer.