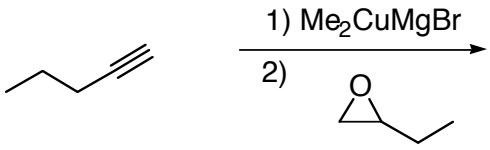
Chem 634
Professor Fox
Exam 2
May 4, 2004
1 hour 15 min

Your Name_____

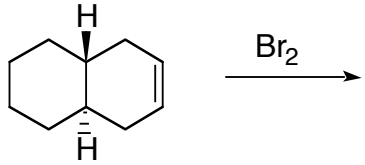
Chem 634 Exam 2 Your Name_____
May 4, 2004

1. Show the products of the following transformations. Mechanistic details are not required, but be sure to indicate relative stereochemistry where necessary (four parts; 5 points each)

a



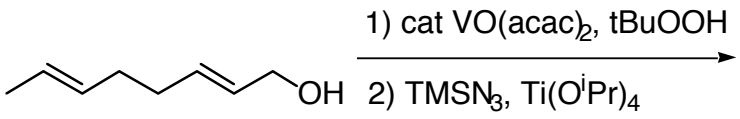
b



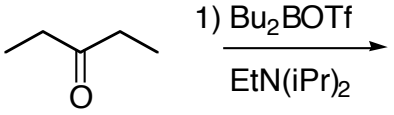
Chem 634 Exam 2 Your Name_____
May 4, 2004

1. (continued)

c



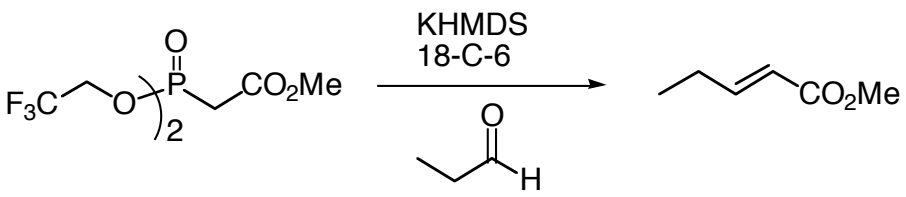
d



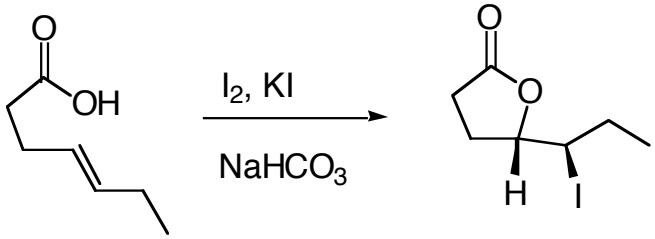
Chem 634 Exam 2 Your Name_____
May 4, 2004

2. Predict if each of the following reactions would proceed as written.
If you feel that the reactionwould proceed, simply write “will proceed as written”.
If you feel that the reaction would not proceed as written, provide a brief but detailed explanation, and indicate the structure of the product(s) that would be formed instead of (or in addition to) the product that is drawn (5 points each).

a



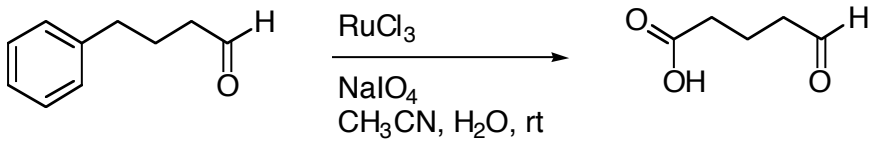
b



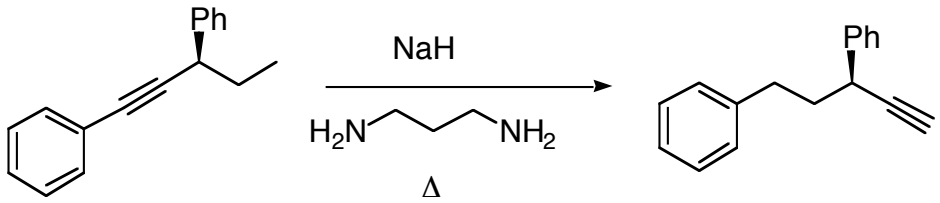
Chem 634 Exam 2 Your Name_____
May 4, 2004

2. (continued).

c

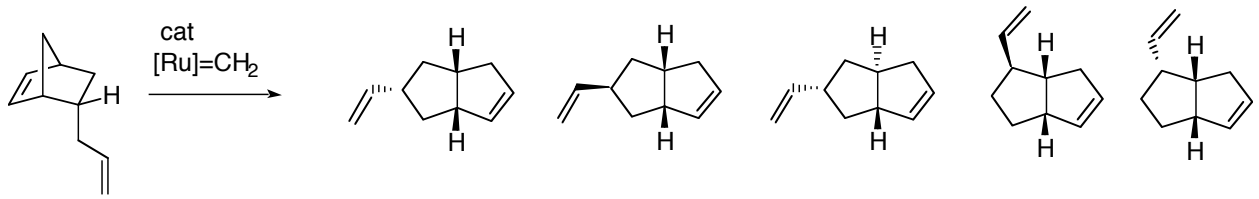


d



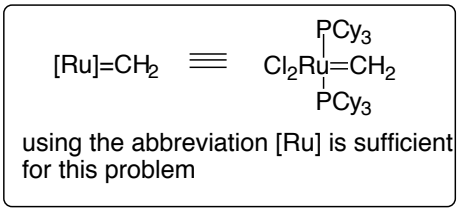
Chem 634 Exam 2 Your Name_____
May 4, 2004

3. The reaction below gives only one of the five products below.



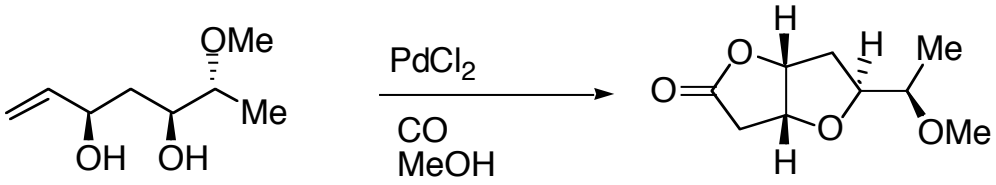
a. Circle the correct structure
b. Provide a detailed arrow pushing mechanism for its formation.

(20 pts)



Chem 634 Exam 2 Your Name_____
May 4, 2004

4. Provide a detailed arrow pushing mechanism (20 points)



Chem 634 Exam 2 Your Name_____
May 4, 2004

5. Outline a multistep synthesis using any materials with 6 carbons or less(20 points)