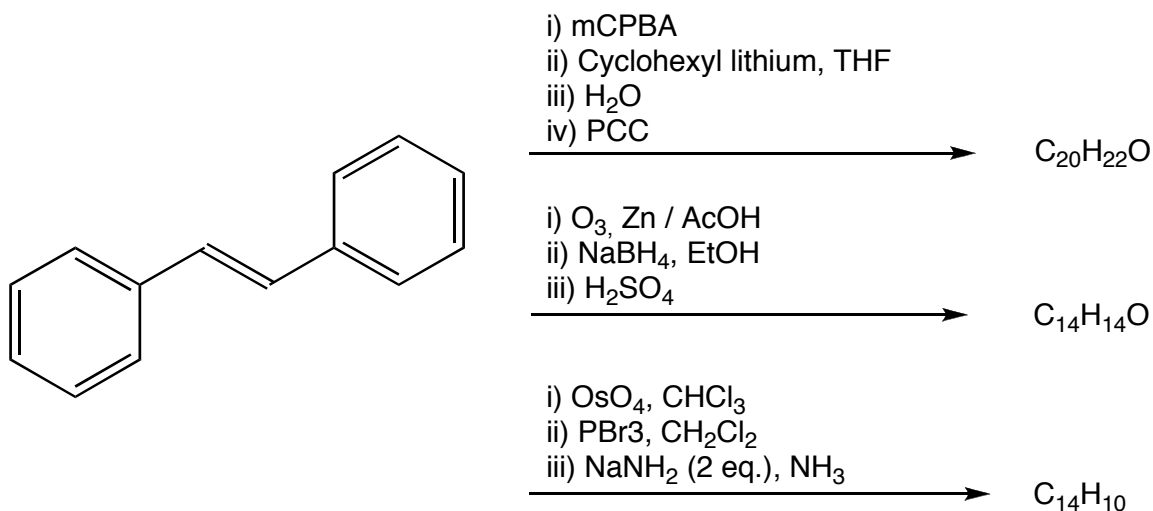


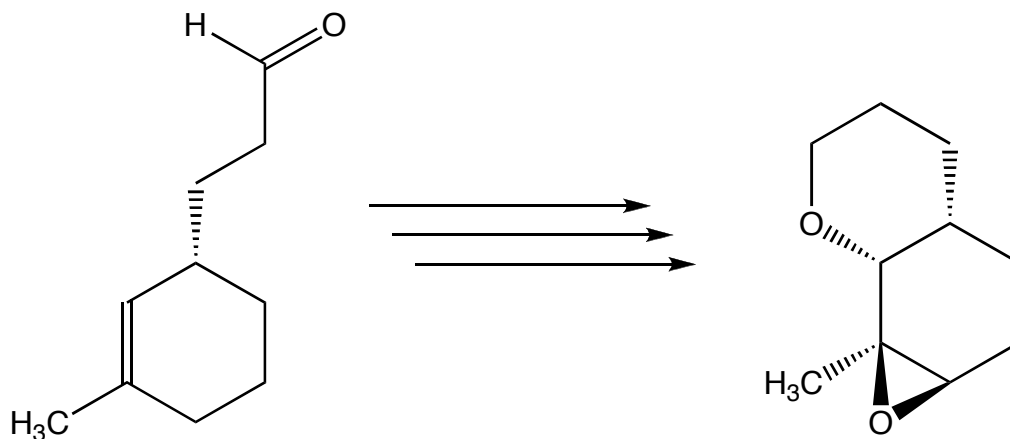
Chemistry 212 – Problem set 3 – Due Monday 19th at 5:00 PM

1) (30 points) For the following reaction maps:



- a) With the exception of the oxidation with PCC and reduction with Zn / AcOH, write detailed mechanisms that will get you to products with the molecular formula indicated.
- b) Determine how many different ¹H and ¹³C signals each product will have.
- c) Mention two characteristic IR absorptions for each of the products.

2) (40 points) a) Propose a reasonable series of transformations, together with their mechanisms, to convert the following starting material on the left to the product on the right.



- b) Determine how many different ¹H and ¹³C signals the product will have, and mention one characteristic IR absorption.

3) (30 points) Work on problems 22 and 23 from Chapter 11. Let me know if you need the numbers in the 5th edition...