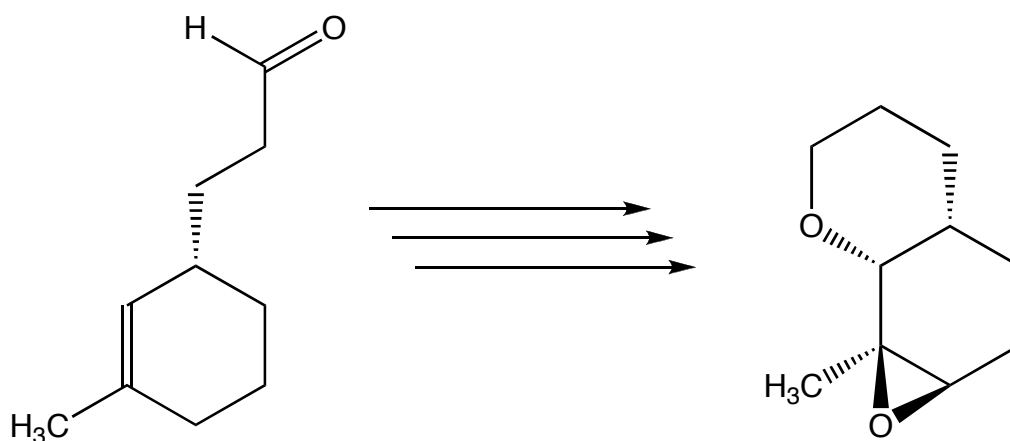


Chemistry 212 – Problem Set 4 – Due Monday, March 17th, at 5:00 PM

- 1) (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 ^{13}C signals the product will have, and mention one characteristic IR absorption.
- 2) (30 points each) For those of you that have the 3rd edition of the textbook, work on the following problems:

- **Chapter 12:** 32 and 43.
- **Chapter 13:** 26 and 41.
- **Chapter 14:** 43 and 57.

For those of you that have the 4th edition of the textbook, work on the following problems:

- **Chapter 12:** 37 and 50.
- **Chapter 13:** 28 and 43.
- **Chapter 14:** 49 and 63.

For those of you that have the 5th edition of the textbook, work on the following problems:

- **Chapter 12:** 38 and 51.
- **Chapter 13:** 28 and 44.
- **Chapter 14:** 49 and 66.