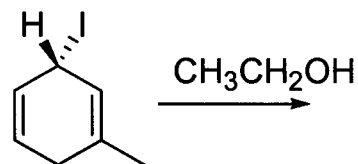
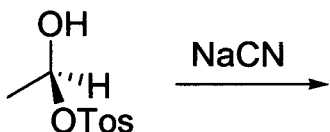
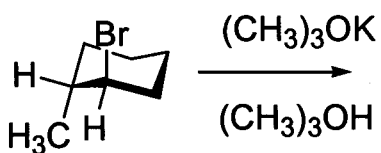
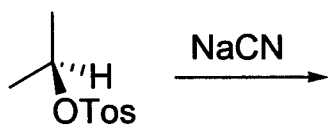


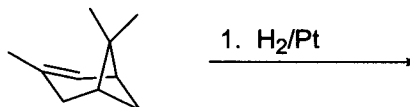
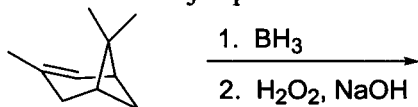
## Chem 30A- Week 8

Warm up

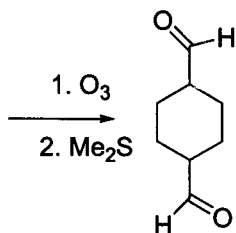
For each of the reactions below say whether or not you will get an enantiomer, racemic mixture, diastereomeric mixture, achiral product (the first 4 are nucleophilic substitution reactions).



what is the major product:

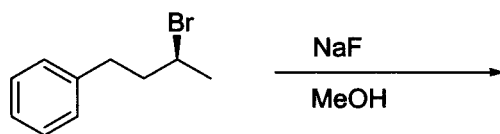
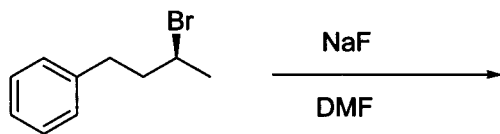
Group Exercises

- There are three starting materials that can make the following product. Two have the empirical formula  $C_8H_{12}$ , and the product is the only product formed in the reaction. The third reactant has the empirical formula of  $C_{10}H_{16}$ , and the other product is formaldehyde.

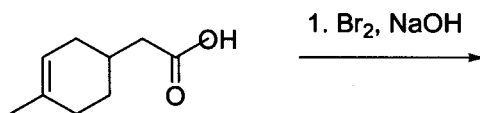


2. S-2-pentanol racemizes slowly over time in the presence of sulfuric acid. Write a mechanism to explain this observation.

3. Provide the products for the following reactions.

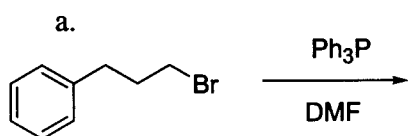


4. Predict the product

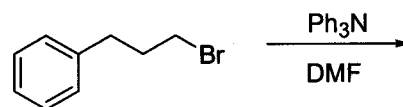


Chapter 8

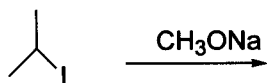
5. Which reaction will proceed more rapidly?



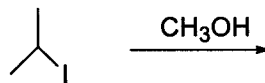
-or-



c.



-or-



6. Propose a mechanism for the following reaction (pinacol rearrangement).

