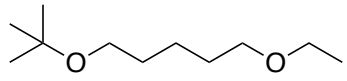
Organic Chemistry 2: Quiz 1

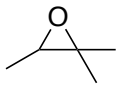
2/4/2026 BJM

Name: Key

1. (6 pts) Provide the structures for the compounds below

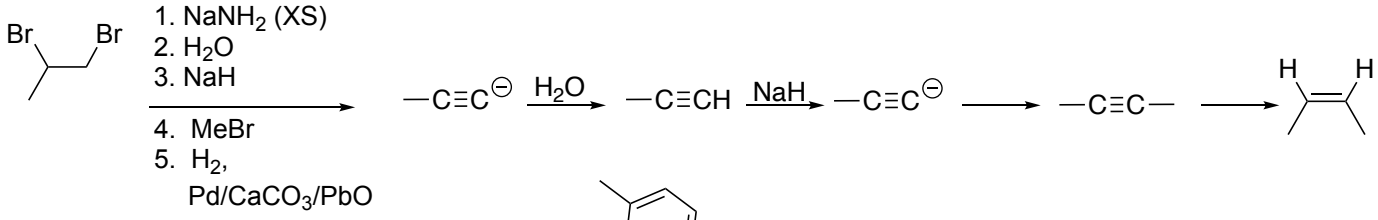


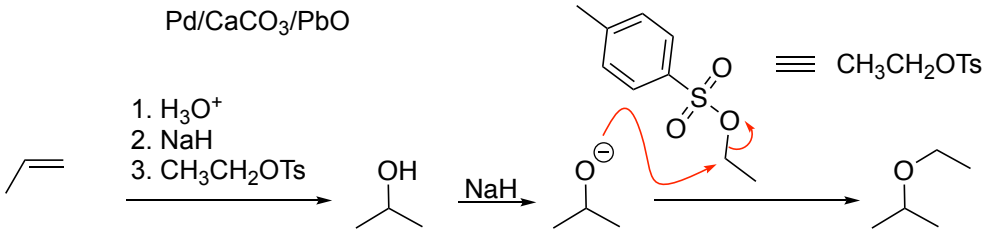
1-(*tert*-butoxy)-5-ethoxypentane

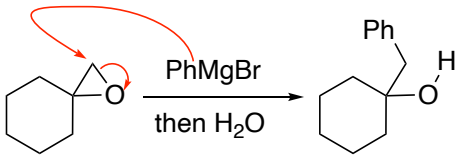


2,3-epoxy-2-methylbutane
a.k.a.
2,2,3-trimethyloxirane

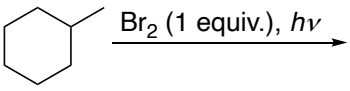
2. (18 pts) For the following reactions, give the major product. Provide intermediate products for partial credit.

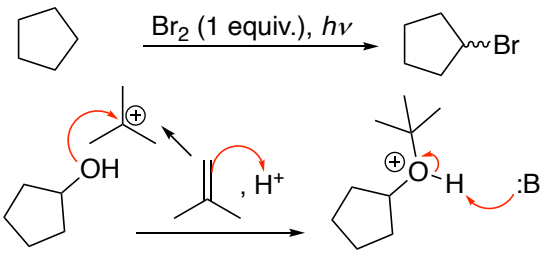




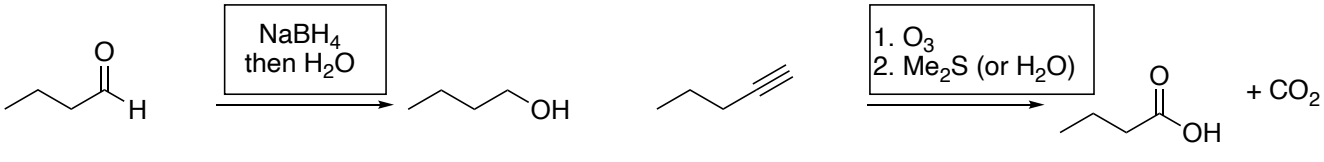


can you do this?



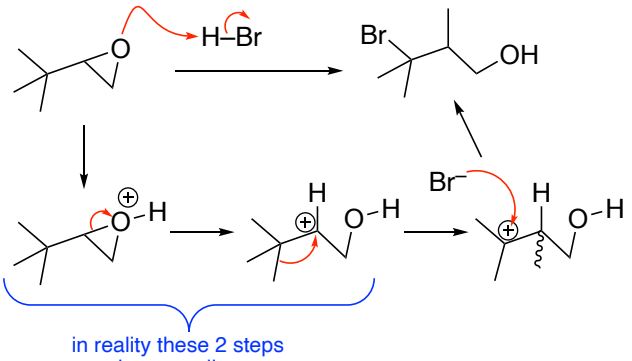


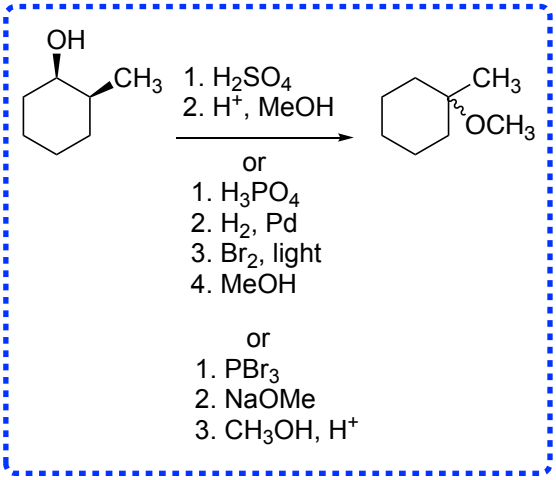
3. (8 pts) Provide reagents for each of the following reactions.



32

4. (5 pts) Provide a detailed arrow pushing mechanism for the following reaction.





5. (8 pts). Provide a retrosynthetic analysis to prepare the following compound from ANY carbon containing starting material(s) with 4 carbons or less. List correct reagents for full credit. Note: You are expected to use the info directly above for your first retrosynthetic step (it will be graded so use it correctly). Remember: you will loose points for the use of acronyms (like PCC, NBS) for reagents. You do not need to provide solvents.