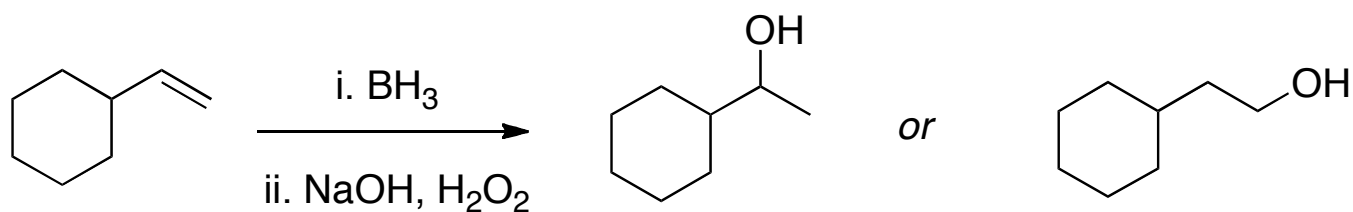
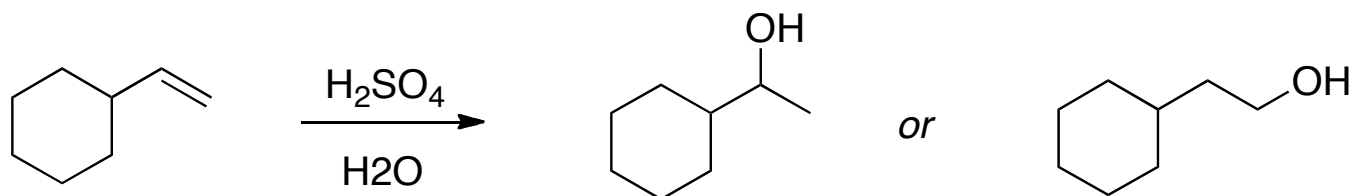
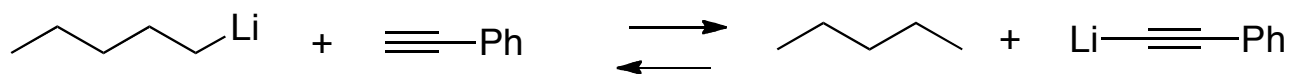


Practice Problems for Exam 2

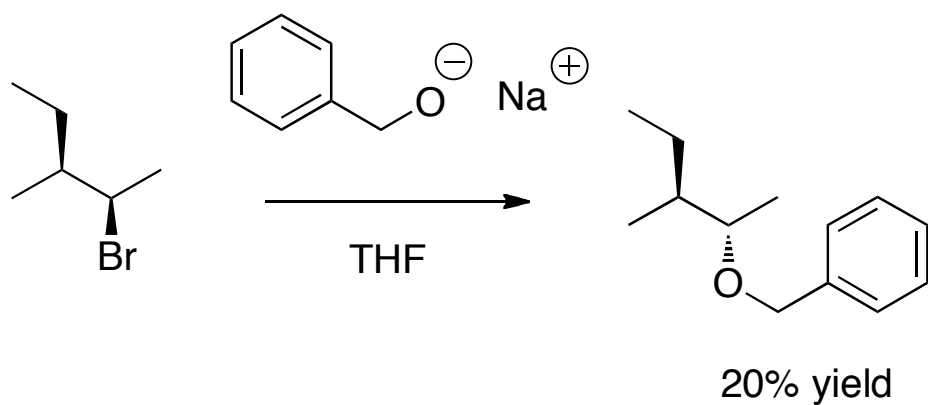
- 1) Predict the regioselectivity of the following 2 reactions and explain your answer using structures.



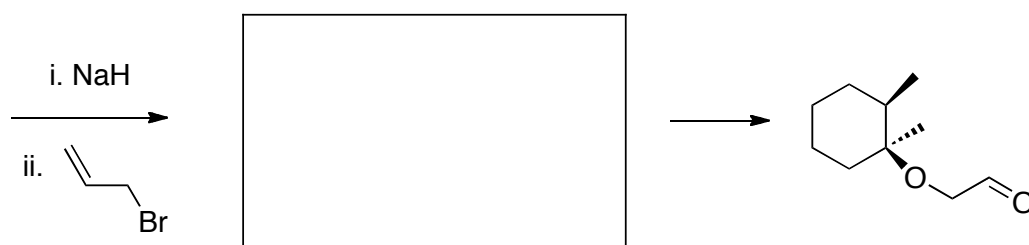
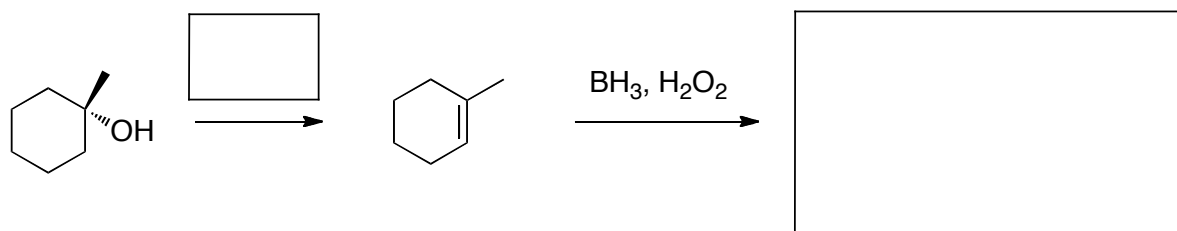
- 2) Which way would the following reaction favor, and explain your answer.



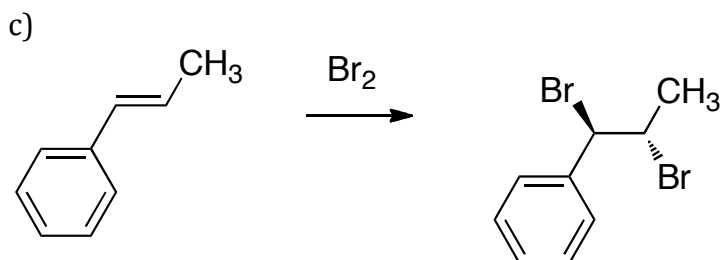
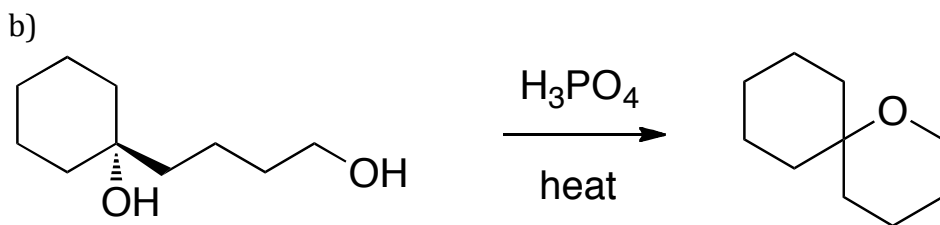
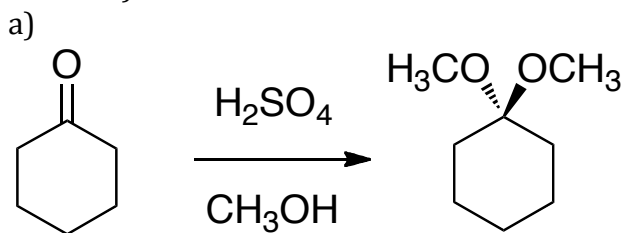
- 3) When the following etherification reaction was attempted, a significant amount of an impurity arises with the molecular formula C_6H_{12} . What is this structure? What reaction could be run to avoid this side product?



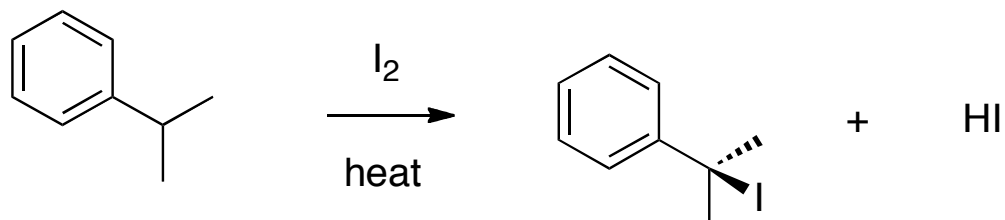
4) Fill in the blanks for the following reaction sequence.



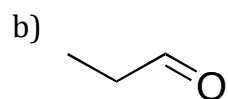
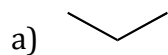
5) Show a mechanism for the following reactions.



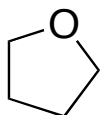
6) Show a mechanism for the following radical reaction.



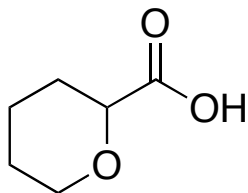
7) Propose syntheses of the following molecules using starting materials of no more than 2 carbons.



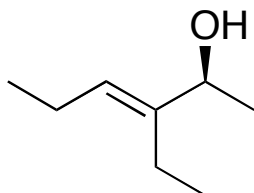
c)



d)

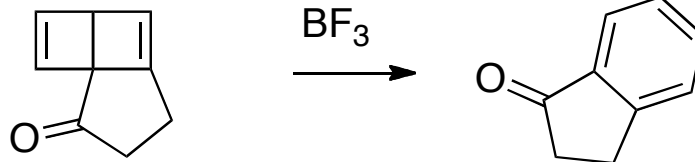


e)



8) Show a mechanism for equation 1 that is consistent with the observation of equation 2.

eq. 1



eq. 2

