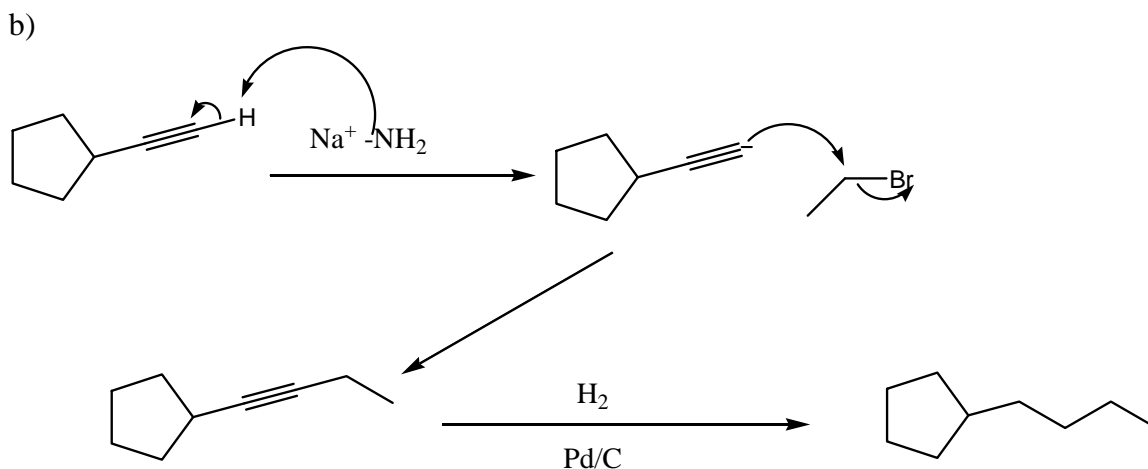
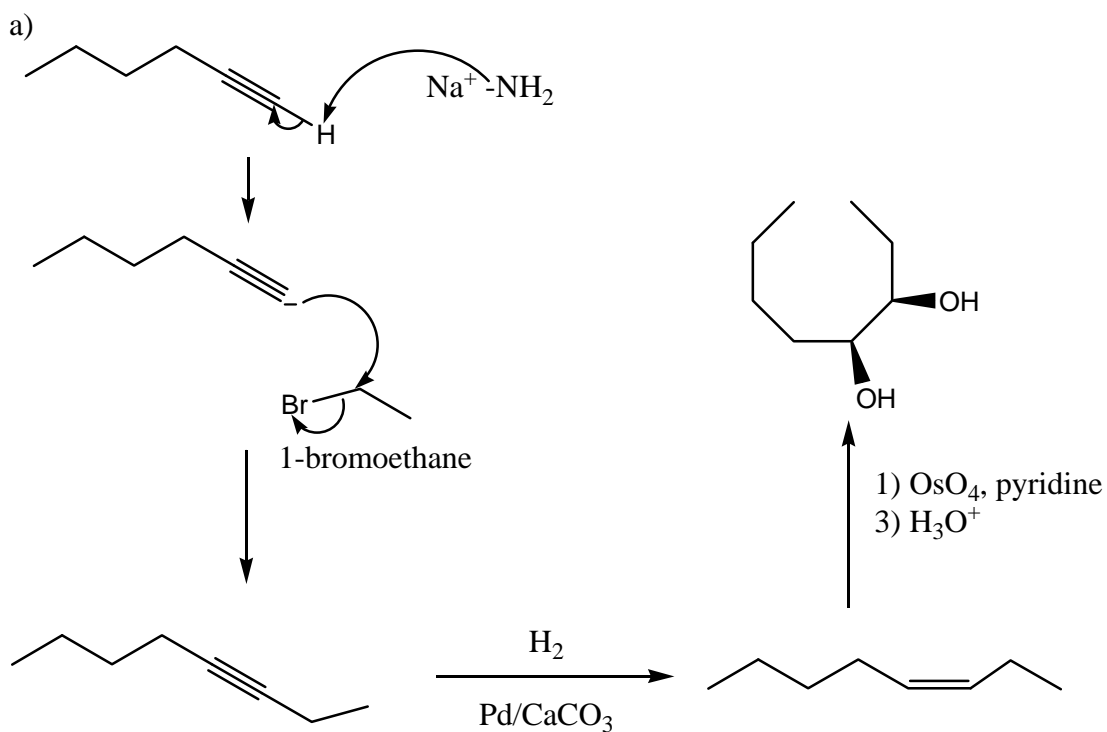
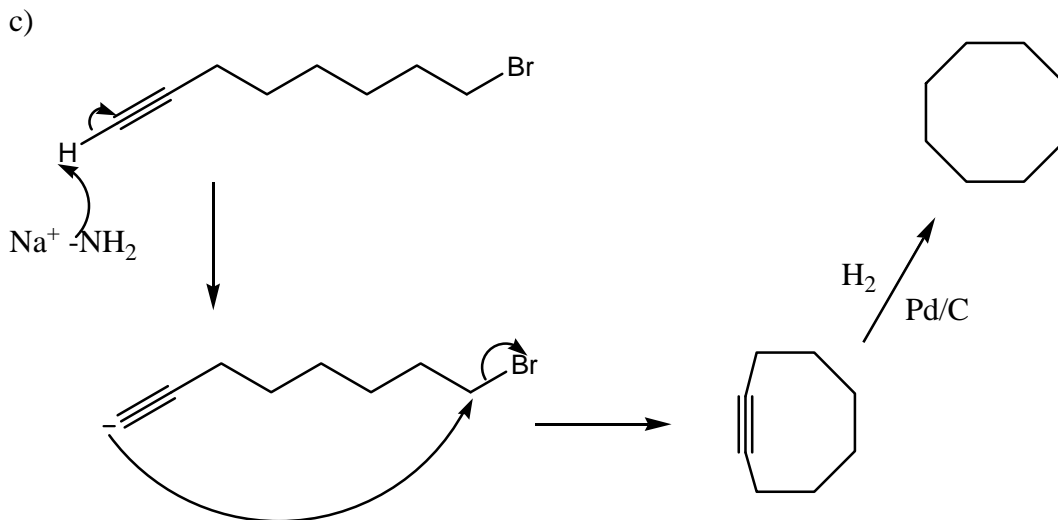


Chem 141
Answers Problem-Set
Wednesday 31st October 2007.

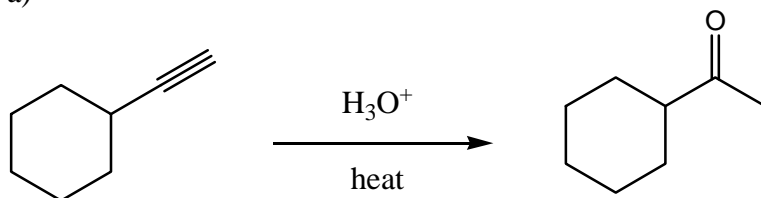
1. Design a synthetic strategy to form the following product from the given starting material. You can use any additional reagents to complete the synthesis.



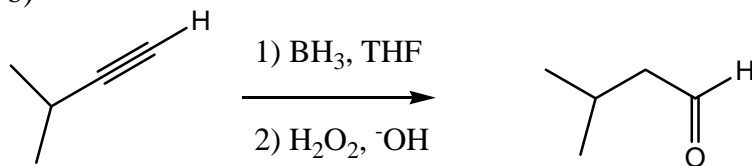


2. Predict the products of the following reactions.

a)



b)



3. Define the term enantiomer.

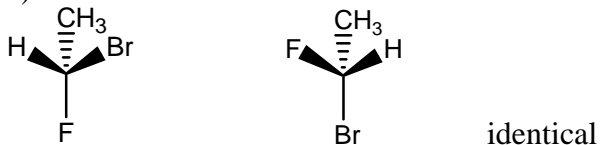
An enantiomer is a non-superimposable mirror image of a compound.

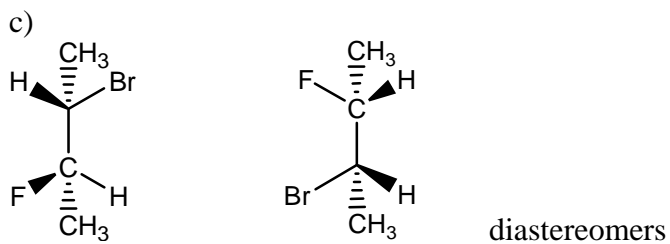
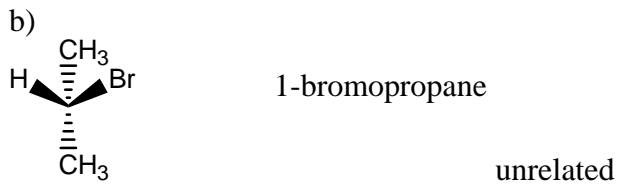
4. Suggest an item from everyday life that is chiral.

A car, a can-opener, a telemark ski.

5. Identify the relationship between the following pairs of structures. (identical, enantiomers, unrelated)

a)





6. Identify and assign R/S orientations for the stereocenters in the structures below

