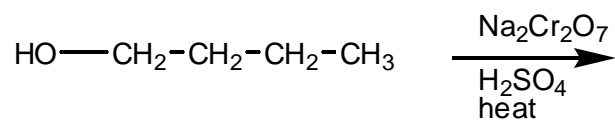


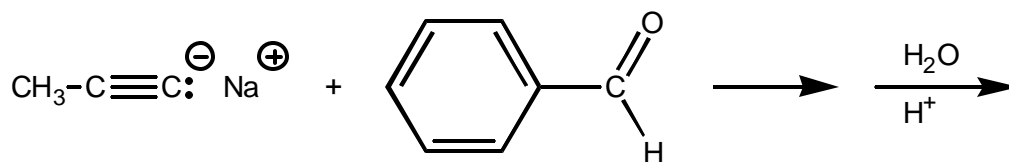
CHEMISTRY 353
G. S. Kriz
PROBLEM SOLVING SESSION #6
May 11, 2006

1. Predict the principal products for each of the reactions shown:

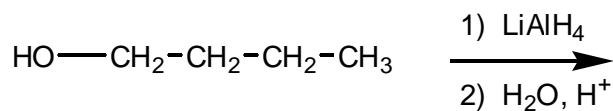
a)



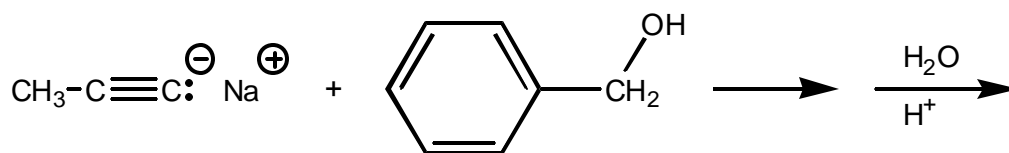
b)



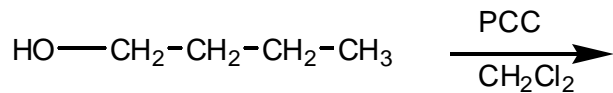
c)



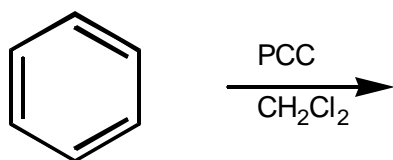
d)



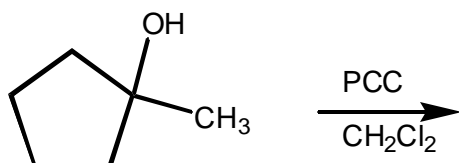
e)



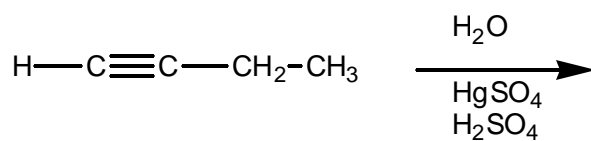
f)



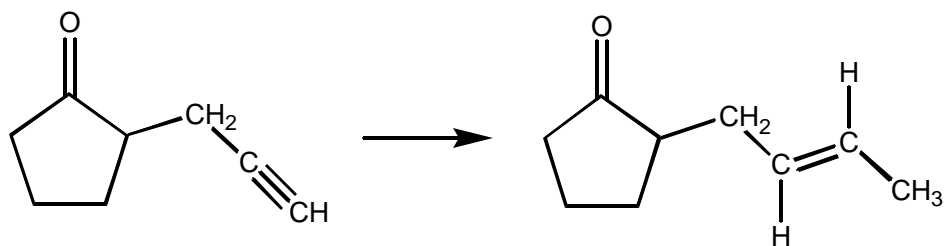
g)



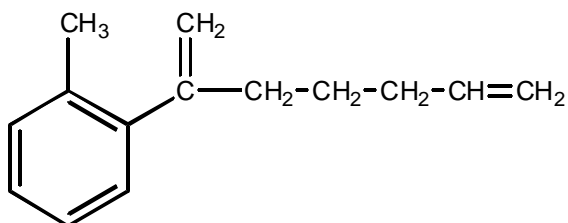
h)



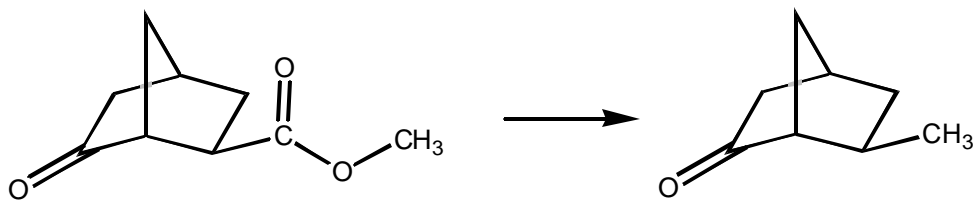
2. Complete the transformation shown. Use whatever reagents you might need, but if you use an organometallic, you will have to make it.



3. The synthesis of the compound shown has been reported in the literature. The starting materials are 2-bromo-1-methylbenzene and 5-hexenal.



4. Outline a sequence of steps to achieve the conversion shown.



5. Outline a sequence of steps to achieve the conversion shown.

