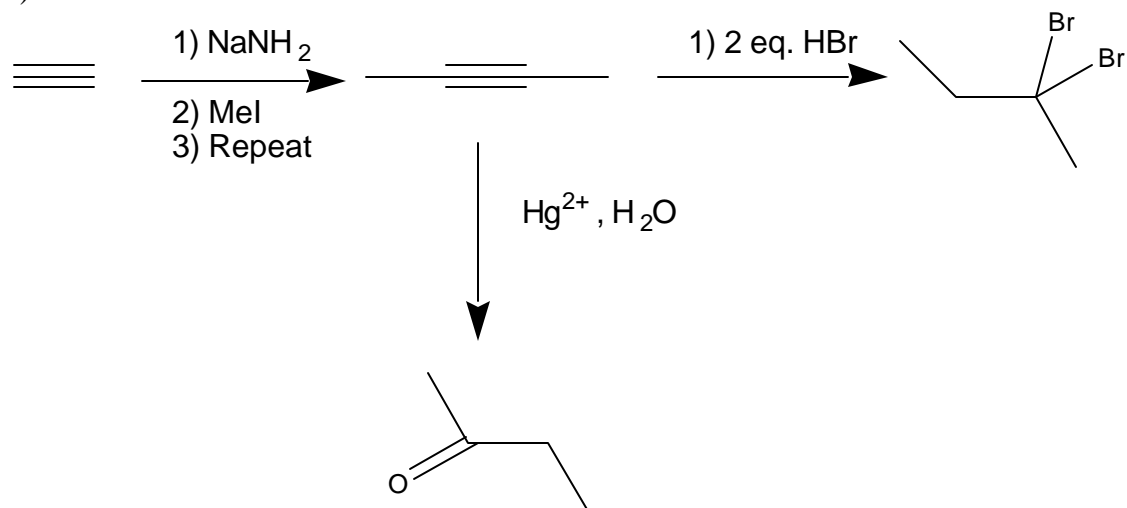


Exam 3 Chem3045 Friday, December 5, 1997

ANSWERS:

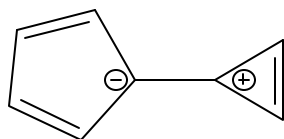
1)



- 2) A = 1,2 dibromobenzene  
 B = 1,3 dibromobenzene  
 C = 1,4 dibromobenzene

3) Will not be on exam 3

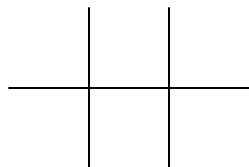
4)



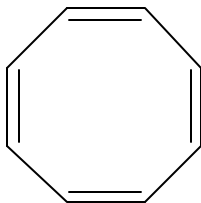
The central double bond will be polarized in order to create aromatic stabilization in both the 5 (6e<sup>-</sup> in pi-system) and the 3 membered rings (2e<sup>-</sup> in pi-system).

The five membered ring would hold the negative end of the dipole and the 3 membered ring would hold the positive end of the dipole.

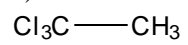
5) a)



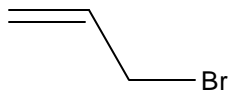
b)



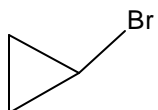
c)



d)



e)



6. Study for this problem using P-set #5 and Answers.