

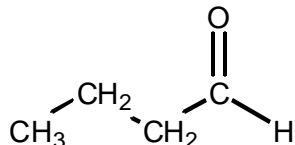
CHEMISTRY 353

G. S. Kriz

PROBLEM SOLVING SESSION #9

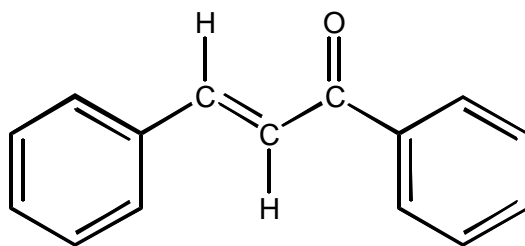
May 25, 2006

1. Draw the structure of the aldol condensation product and the subsequent dehydration product that would be formed from the aldehyde shown.

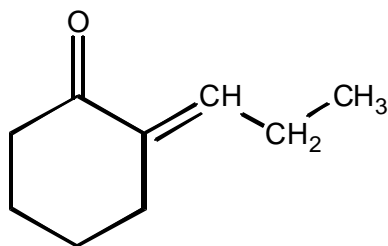


2. Draw the structures of the carbonyl compounds that you would use to prepare the compounds shown.

a)

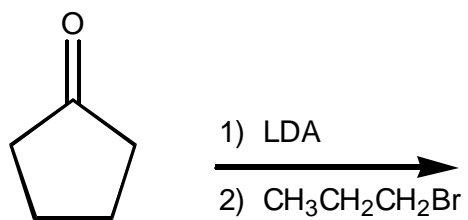


b)

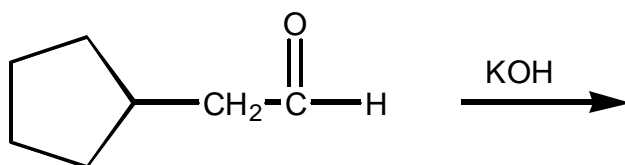


3. Draw the structures of the products of the following reactions.

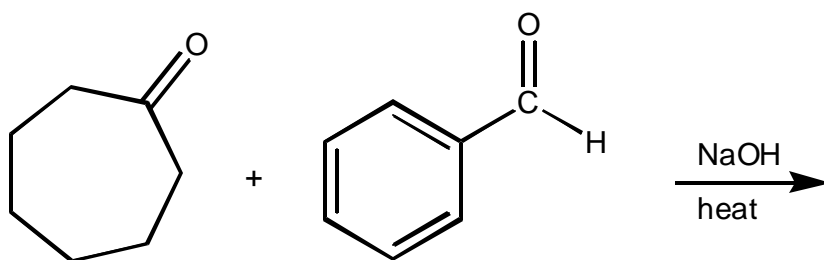
a)



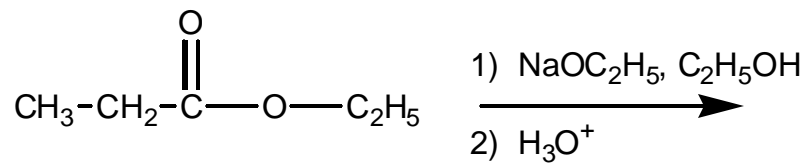
b)



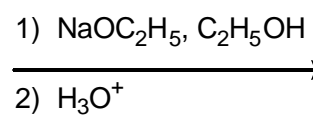
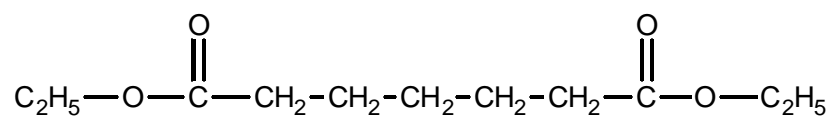
c)



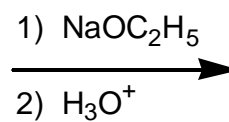
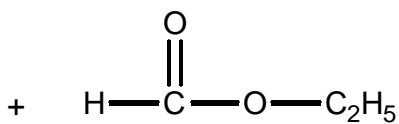
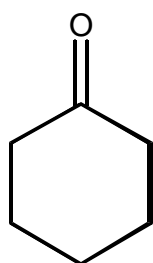
d)



e)

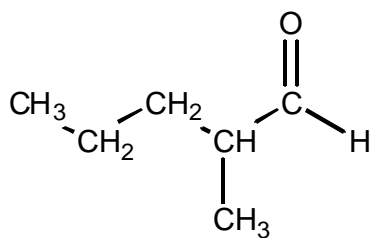


f)

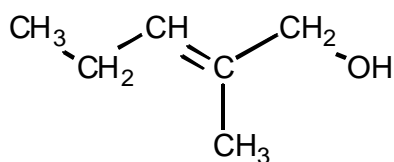


4. Show syntheses of these compounds from propanal.

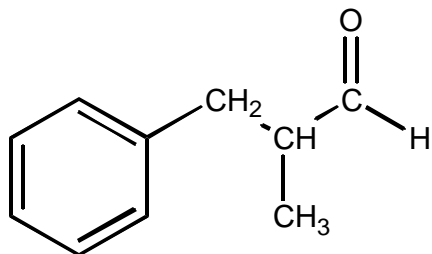
a)



b)

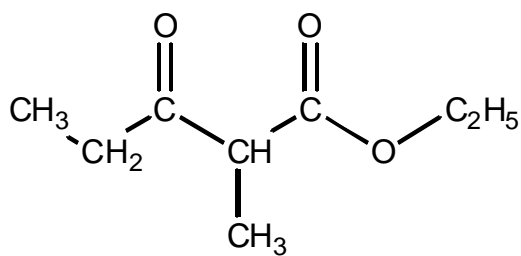


c)

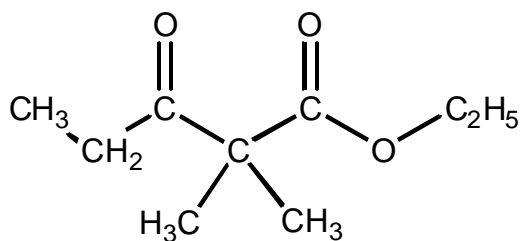


5. Show syntheses of these compounds from ethyl propanoate

a)



b)



c)

