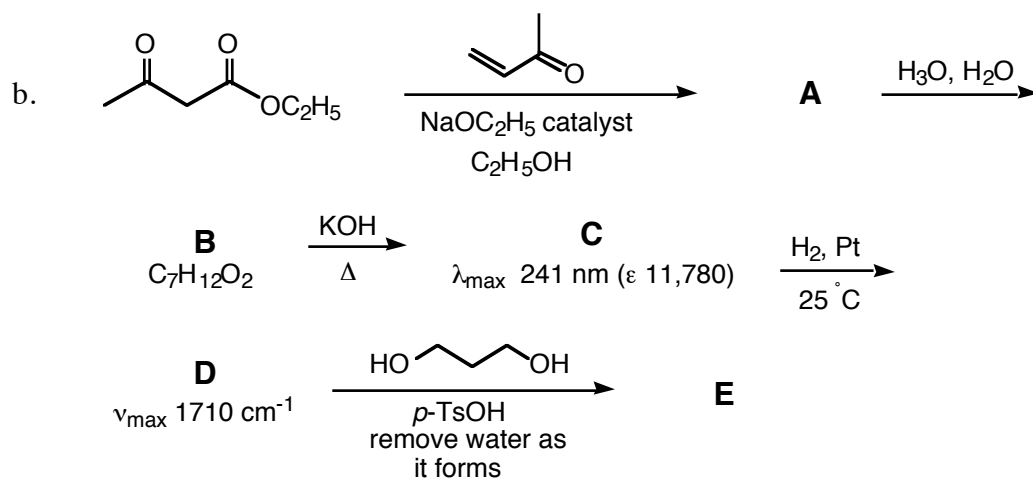
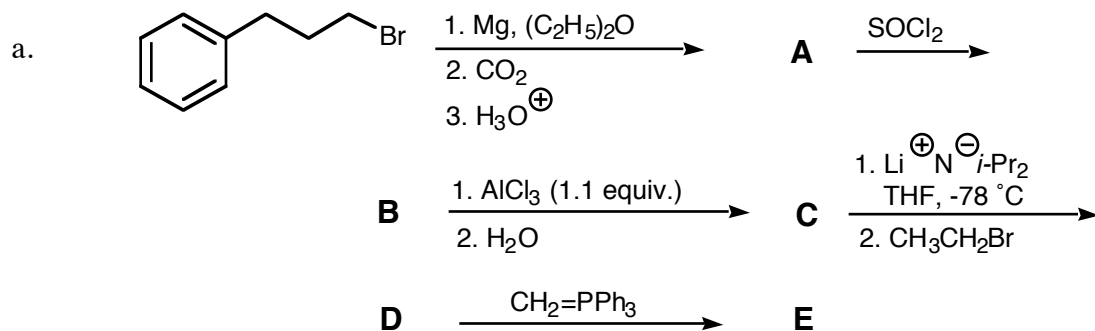


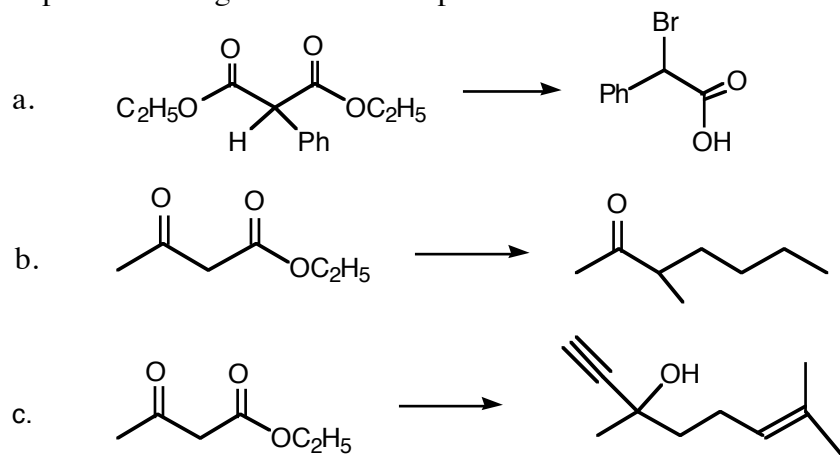
## WORKSHOP, Chapter 21

*Ester Enolates*

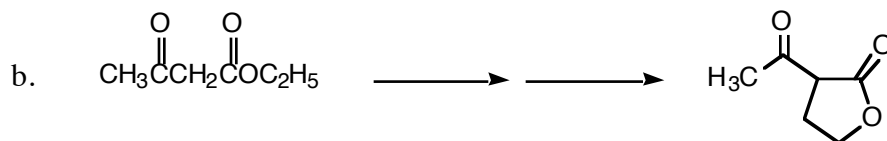
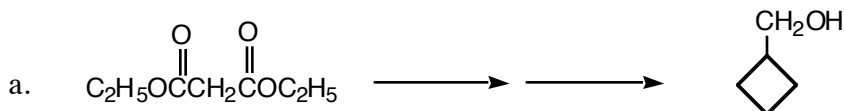
1. Provide structures for the lettered compounds in the following reaction schemes:



2. Show how each of the following transformations could be carried out in three or fewer steps. Show reagents for each step and structures of intermediate products.



3. Propose efficient synthetic pathways for each of the following:



4. Supply the lettered reagents or reaction products, as appropriate, for the following synthetic schemes:

