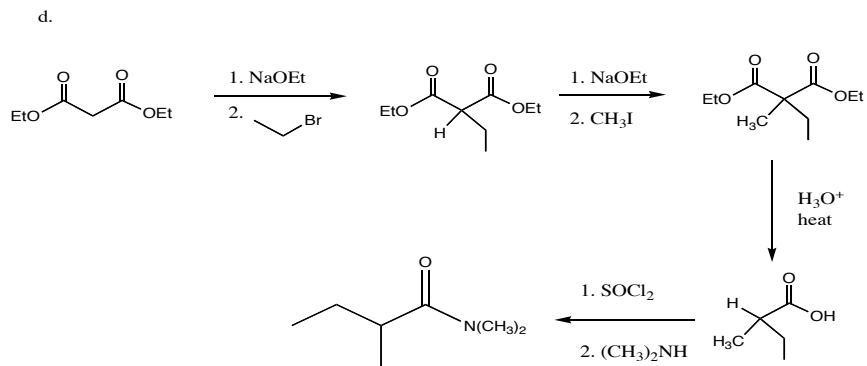
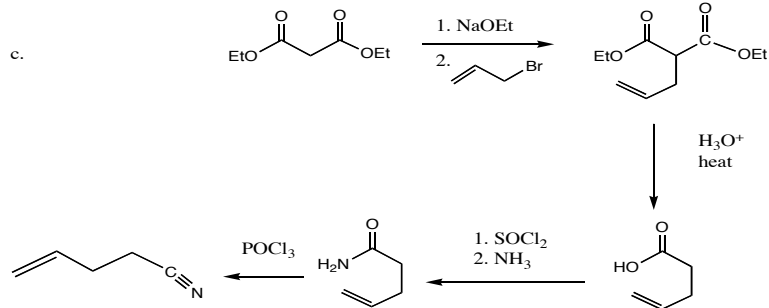
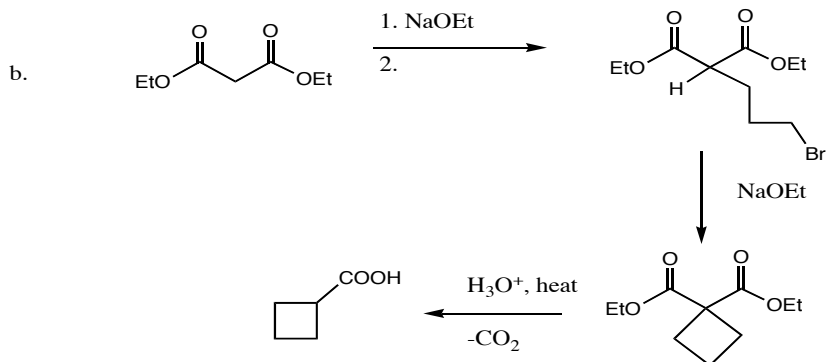
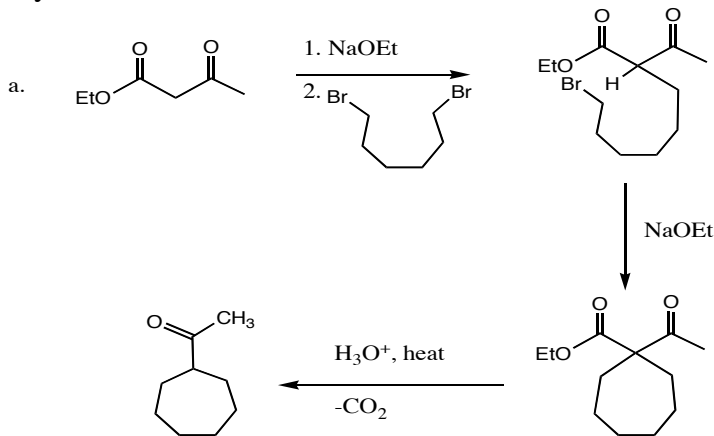
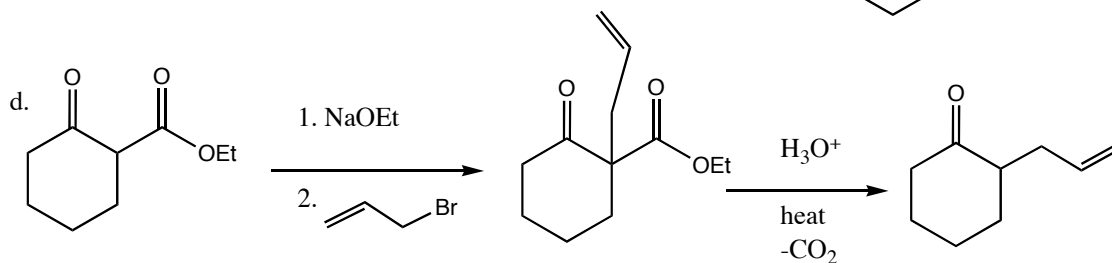
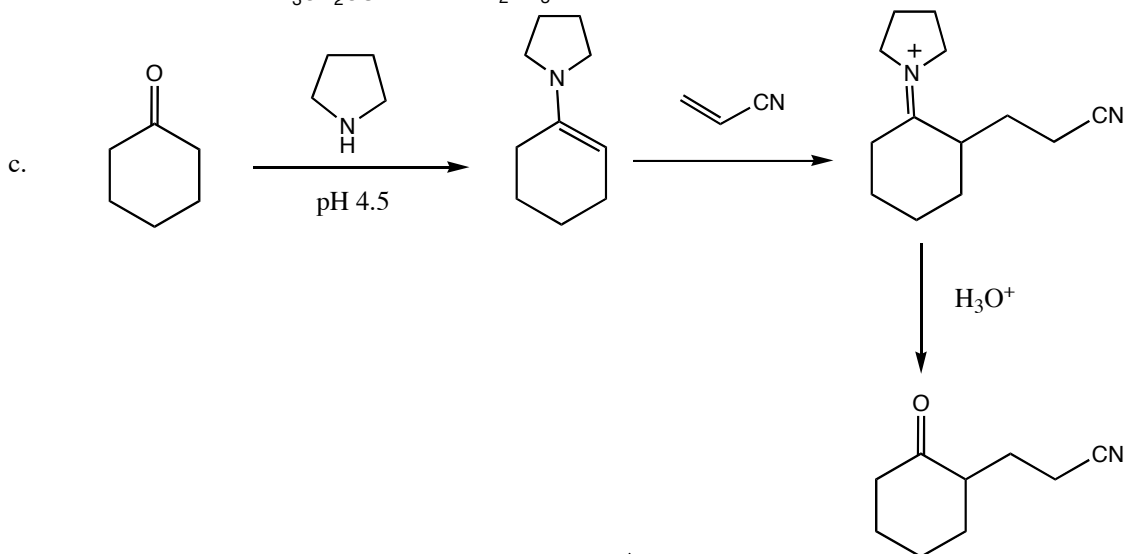
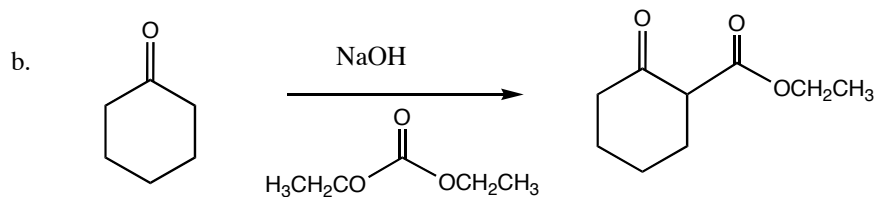
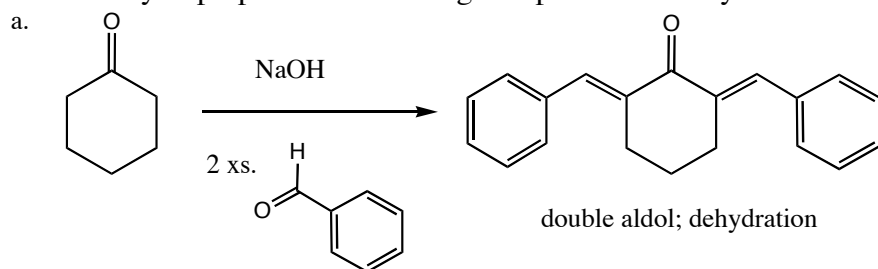


Additional Problems for Practice:

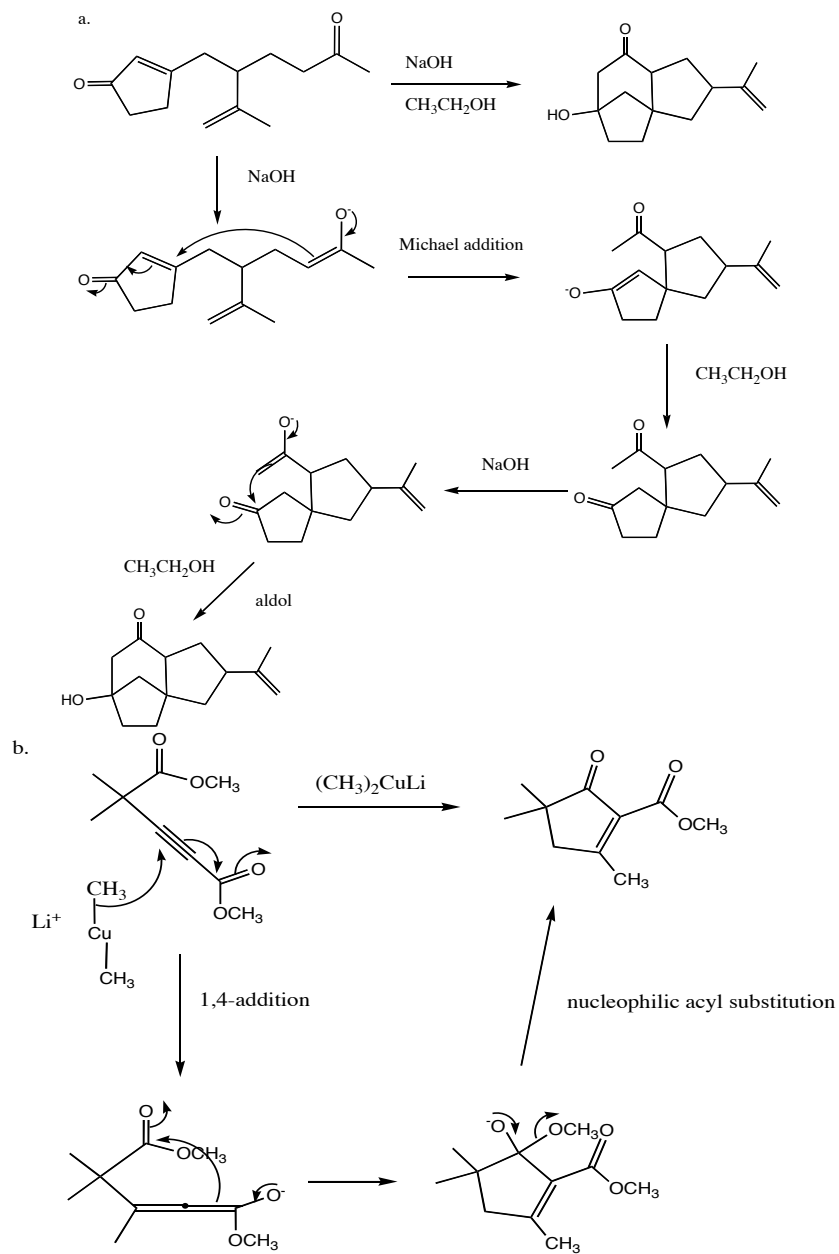
1. How would you prepare these compounds using either an acetoacetic ester synthesis or a malonic ester synthesis?



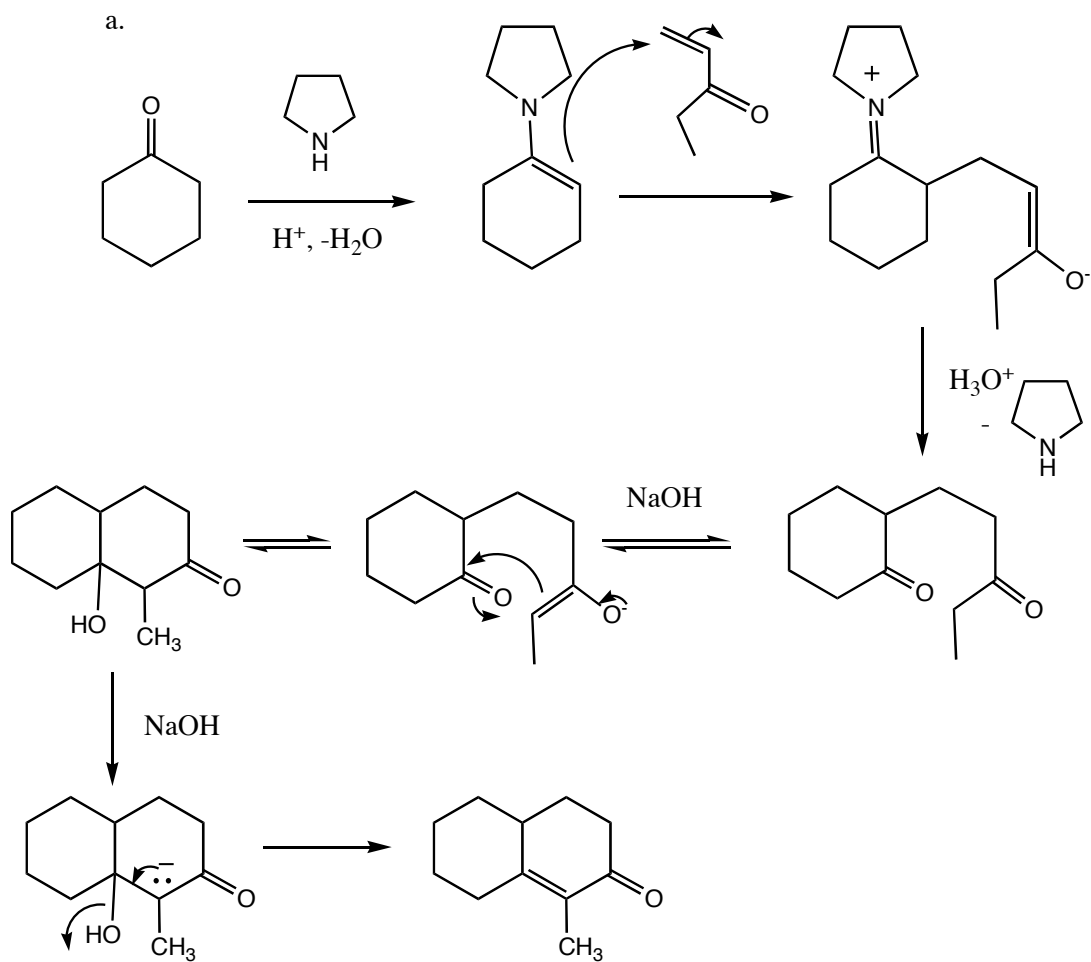
2. How would you prepare the following compounds from cyclohexanone?



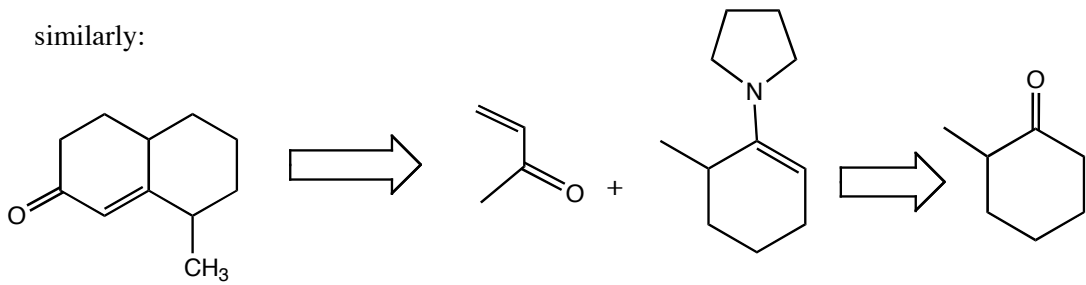
3. Propose a mechanism to account for the following reactions:



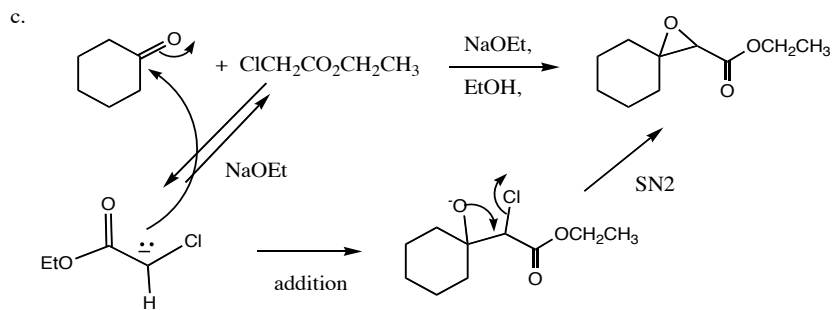
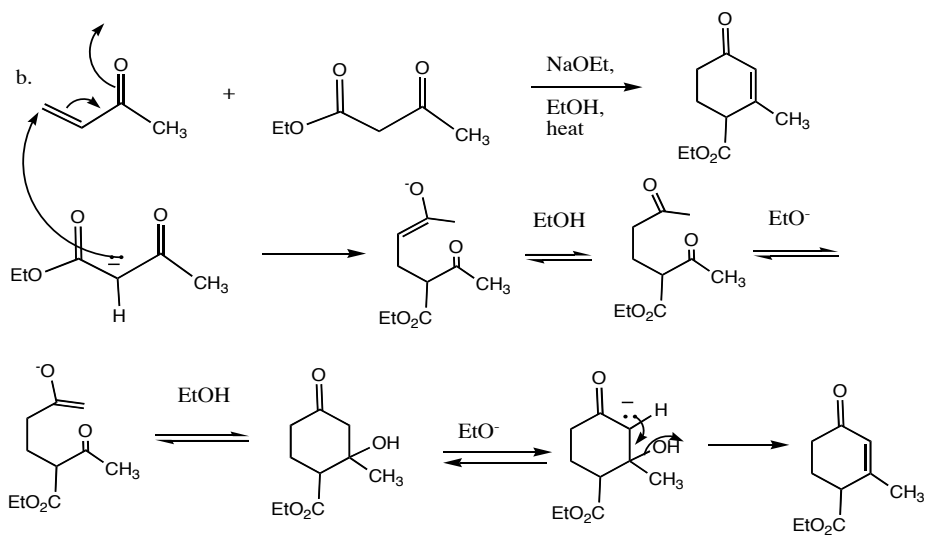
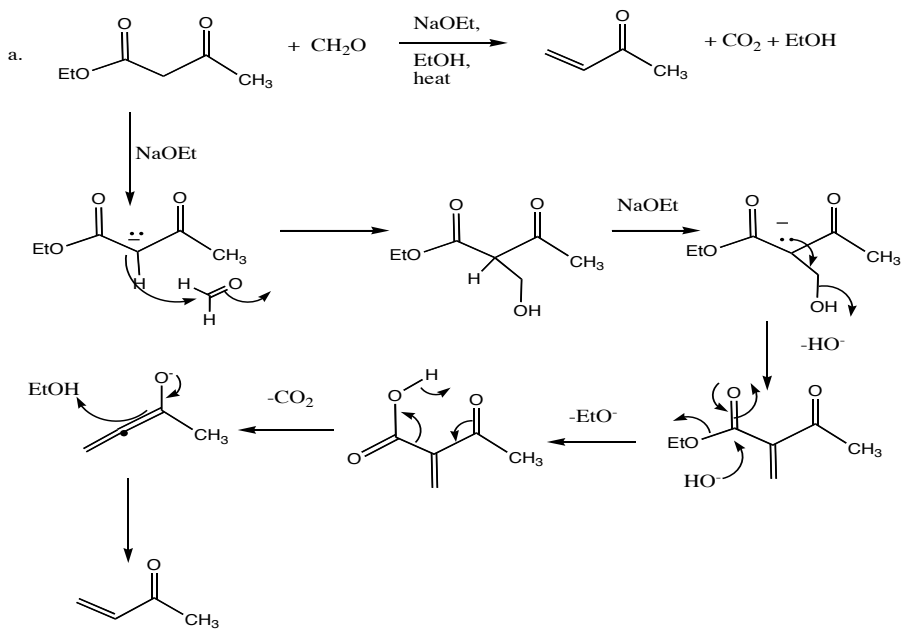
4. How could you prepare the following cyclohexenones by combining a Stork reaction with an intramolecular aldol condensation?



b. similarly:



5. Show a mechanism for the following reactions:



6. Double Michael additions have been used to prepare spirocyclic compounds such as the one below. Show a mechanism for the formation of **B**.

