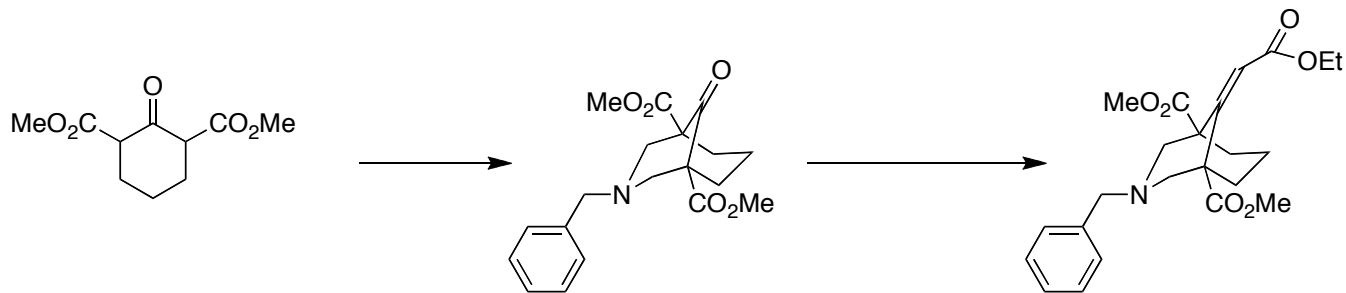
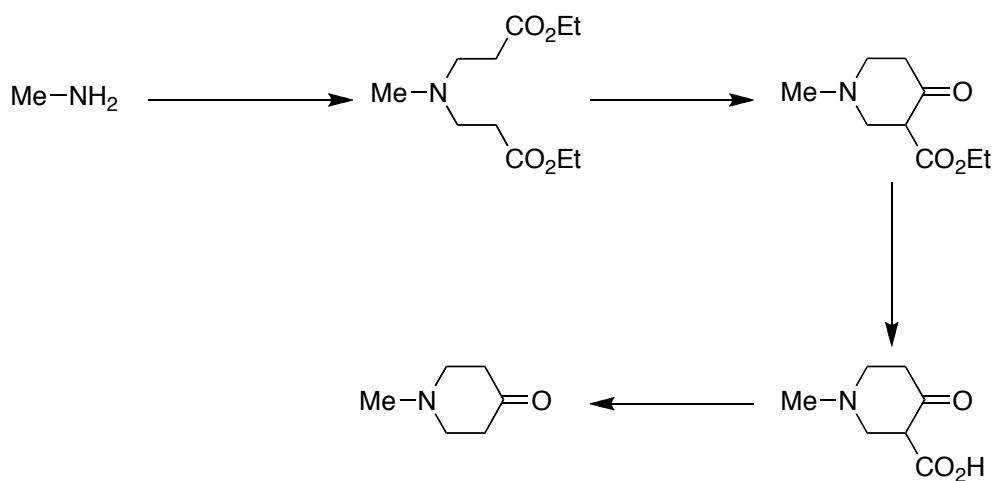
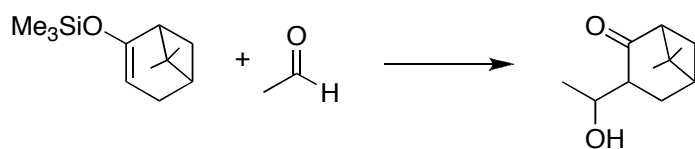
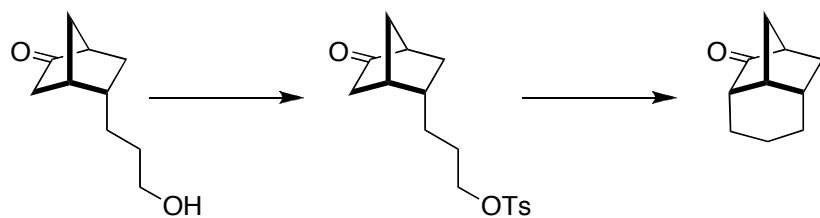
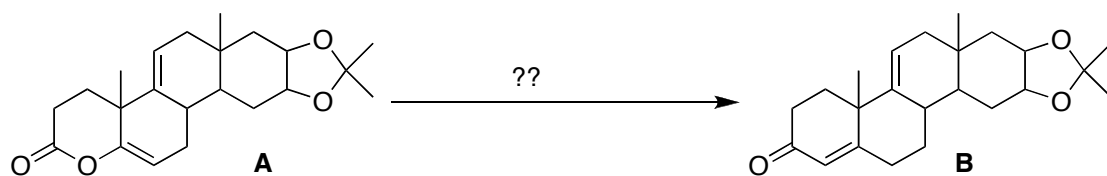
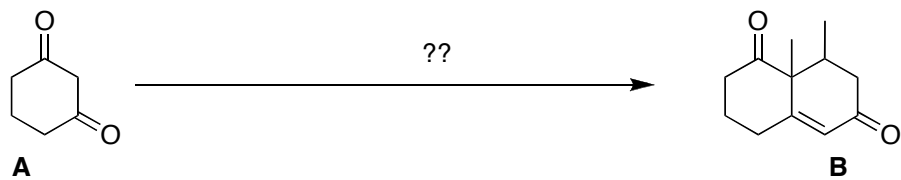


Problem set 3
Chapters 26–29. Advanced enol and enolate chemistry.

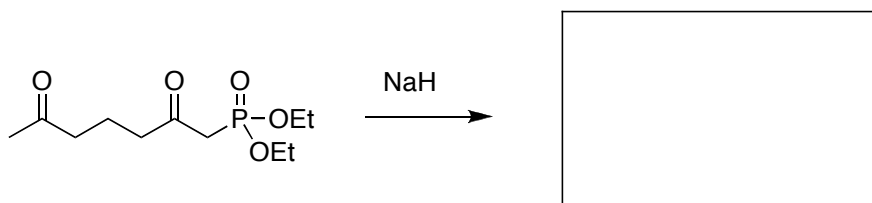
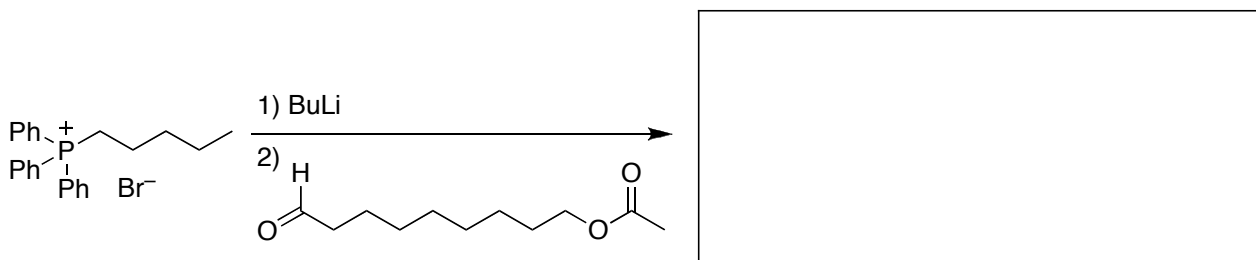
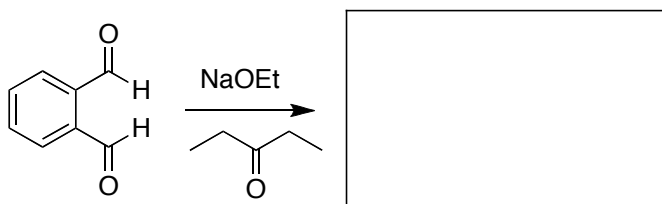
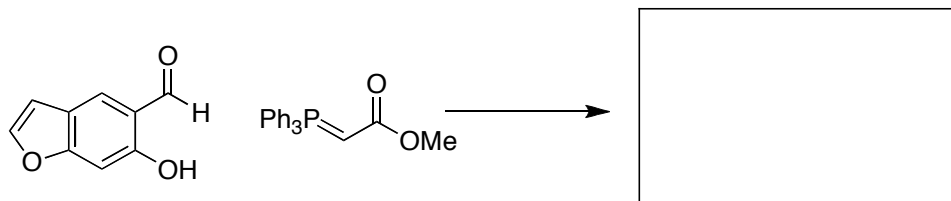
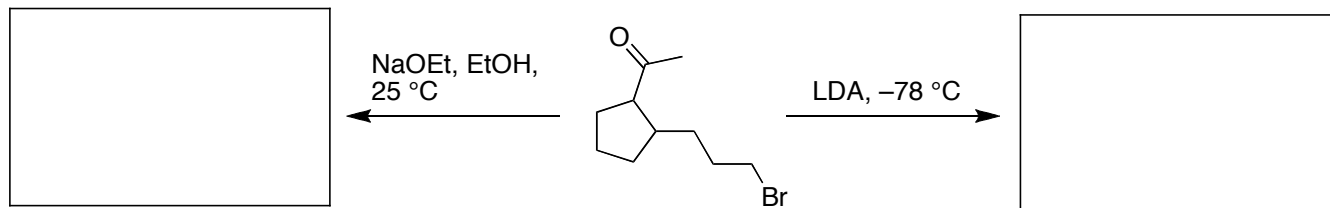
1) Fill in the details of reagents and conditions above each arrow. For some arrows, more than one step may be necessary.



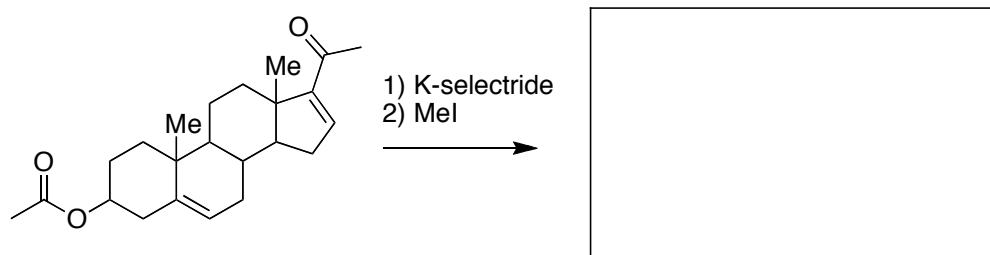
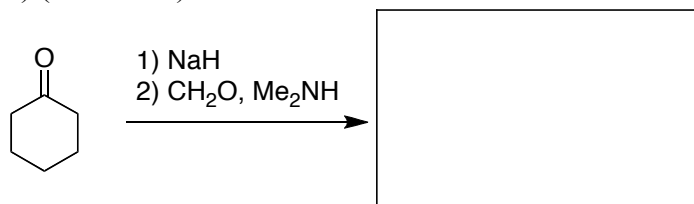
2) How would you make **B** from **A**? Show all reaction conditions and intermediates in the space below each reaction.



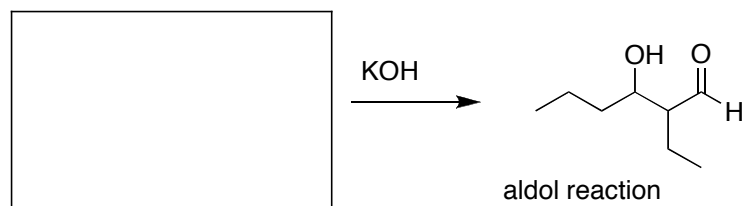
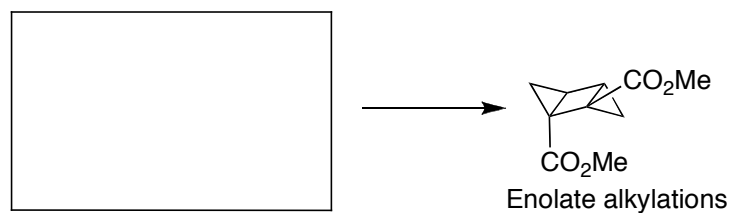
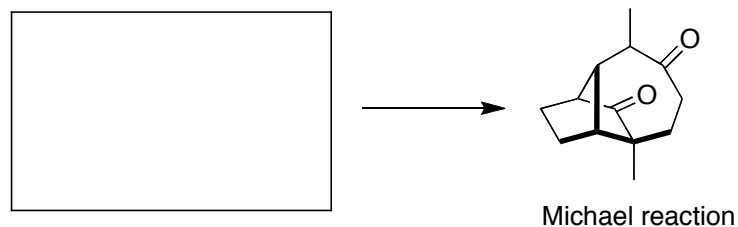
3) Draw the structures of the products formed by each reaction.



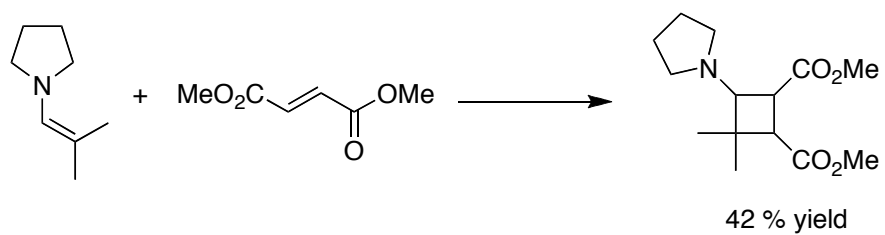
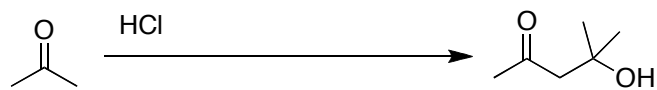
3) (continued)



4) Draw the structure of a suitable precursor for the products shown at right that will take advantage of the reaction type shown.



5) Provide a detailed mechanism for the following transformations, showing all intermediates and proton transfers.



6) Clearly label the three most acidic protons on the following molecule (1 = most acidic, 3 = least acidic).

