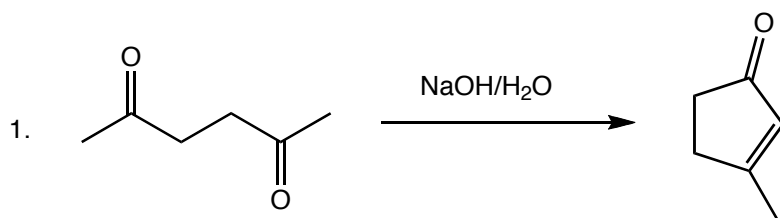


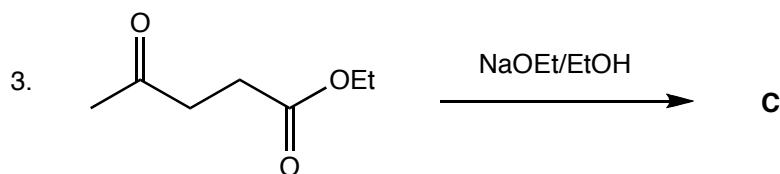
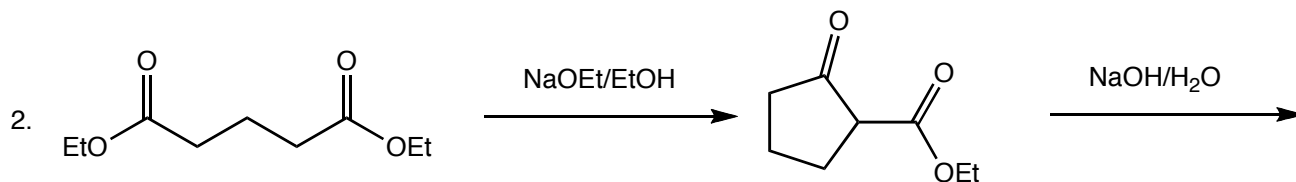
Study Question 7

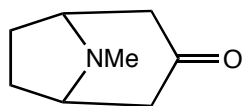
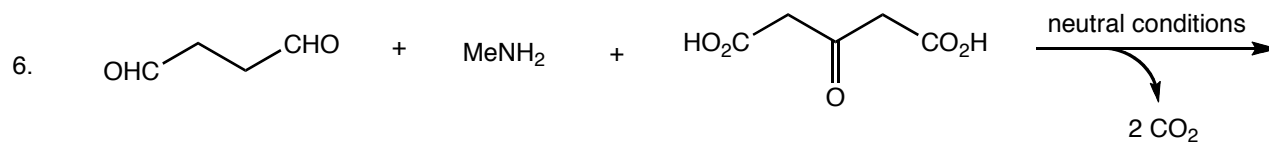
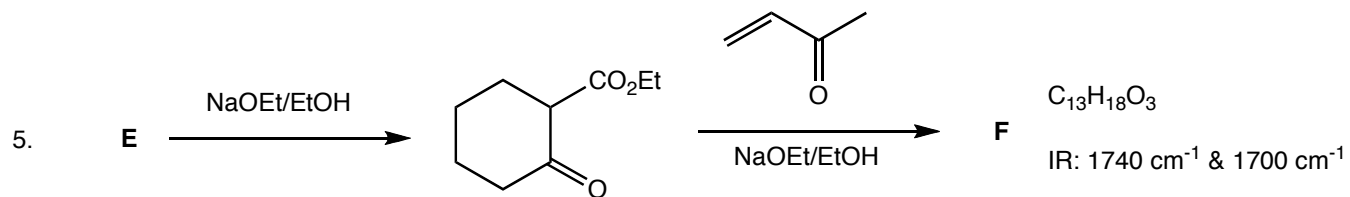
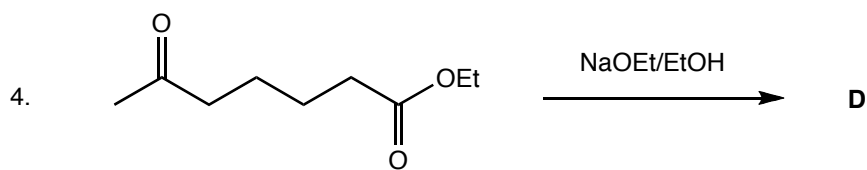
For the following reactions, provide any missing structures, draw a mechanism for each step of the reaction, give the category of the reaction (hydrolysis, reduction etc) and give the name of the mechanism (E1 etc) (each step will likely be a different mechanism). In some cases not all products are given (though the main product is); the other products will be come evident when you draw the mechanism. Work these in order, as the complexity increases steadily and it helps to see how one goes before trying the next one. Have a mechanism party!

Question #6 is the famous "biomimetic" synthesis of tropinone by Sir Robert Robinson in 1917. Biomimetic means the steps are believed to follow how things actually occur in nature. Tropinone is the core ring of cocaine. All the reactions that lead to tropinone occur in a single flask, which is pretty amazing.



Note: this is a condensation rxn followed by elimination/dehydration





troponone

