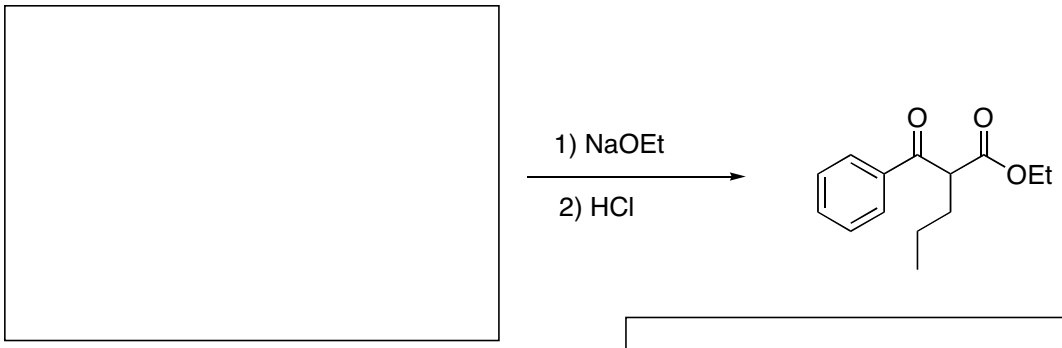
CH 232, Spring 2003
Dr. Shaughnessy
Problem Set #6
Due, 9:00 AM, March 14th, 2003

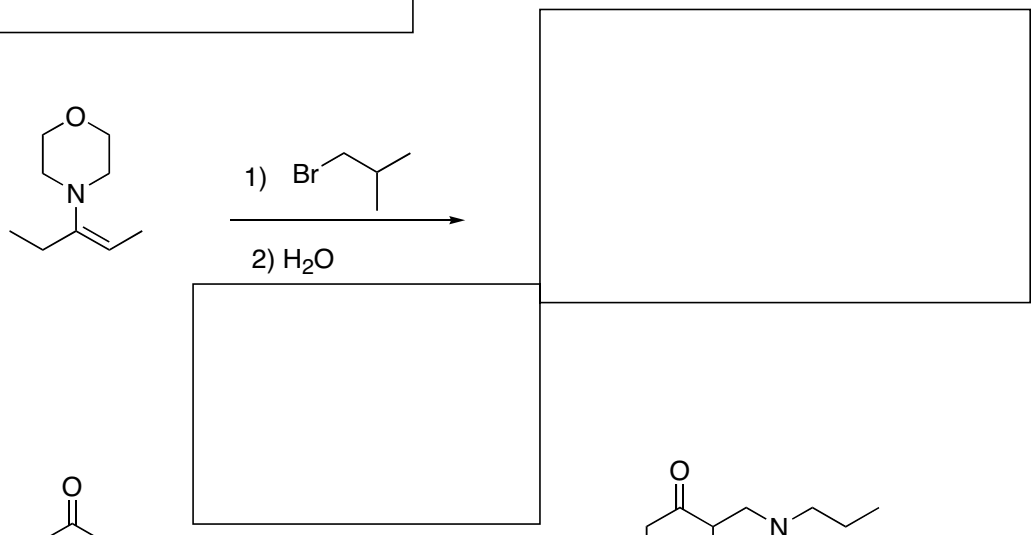
Name:_____

1) Fill in the missing reagent(s), starting material(s), or product(s) in the reactions below.

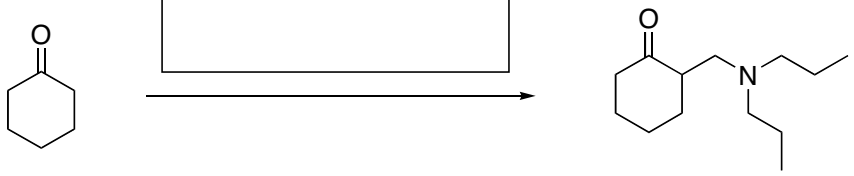
a.



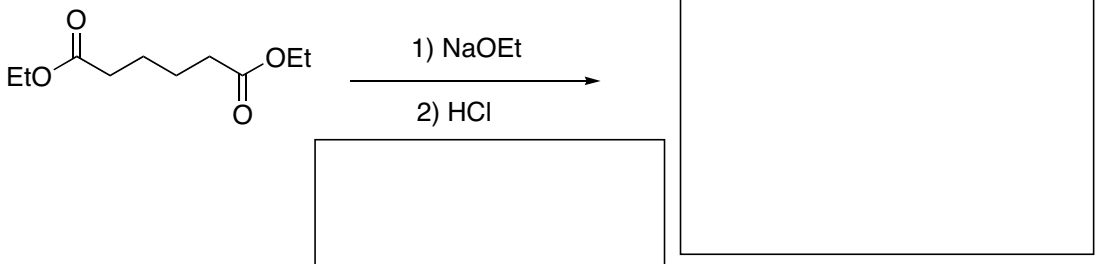
b.



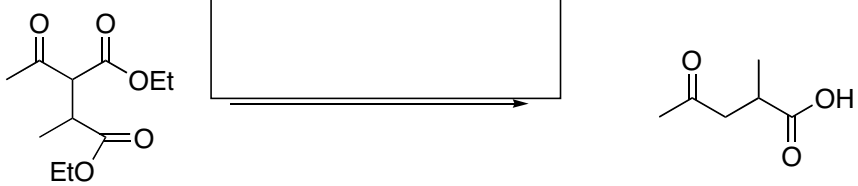
c.



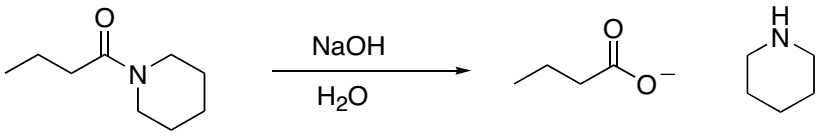
d.



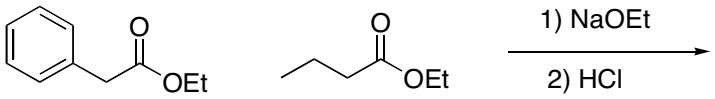
e.



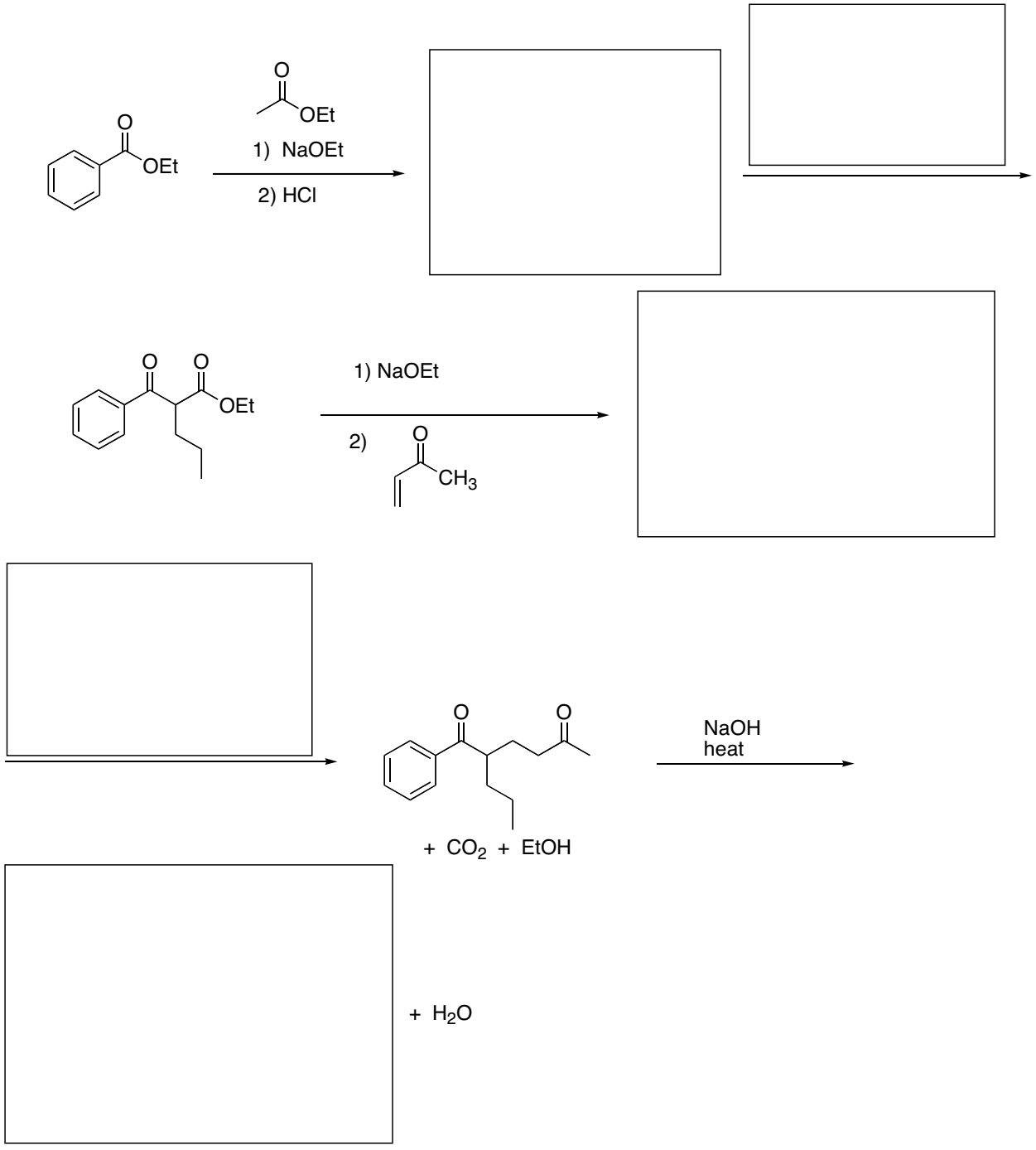
2) Provide a detailed mechanism for the hydrolysis of the amide shown below under basic conditions.



3) Joe Bob, an 8th year senior, is trying to do a crossed-Claisen condensation of the two esters shown below. Unfortunately for Joe Bob, he's going to get a mixture of 4 different ß-ketoester products. Draw all four possible products for the Claisen reaction below.

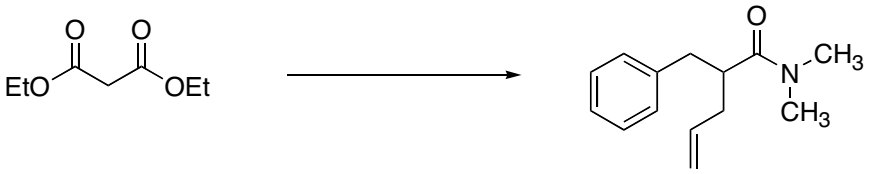


4) Fill in the missing reagents or intermediates in the synthetic scheme below.



5) Provide a synthesis for each molecule shown below starting from the indicated compound. In addition to the starting material, you may use any necessary reagents.

a.



b.