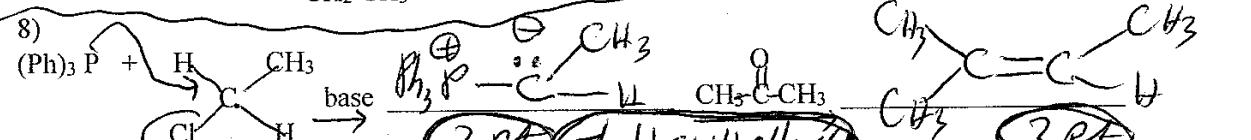
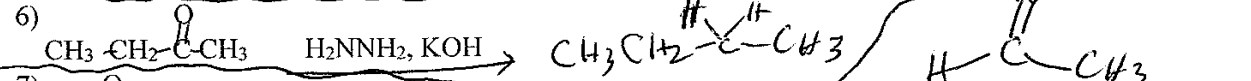
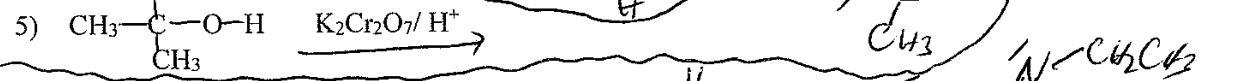
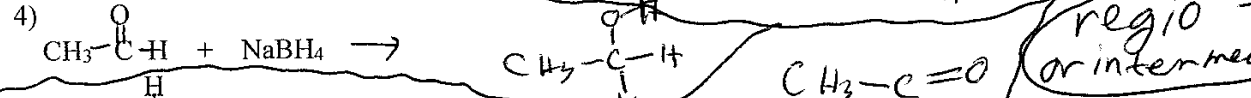
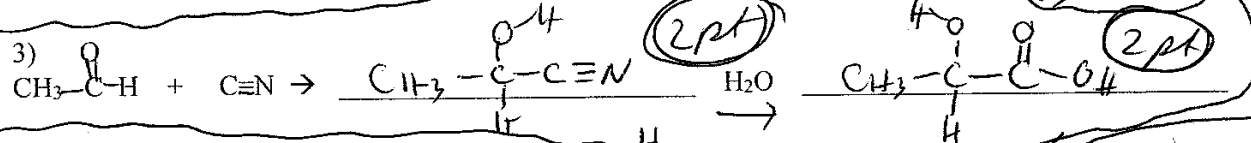
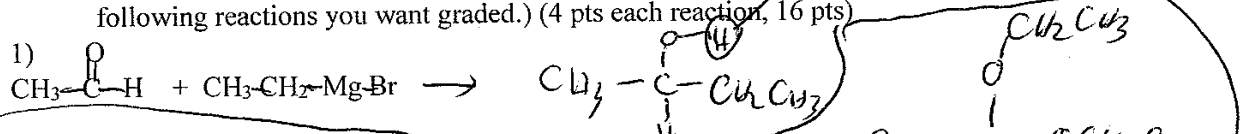


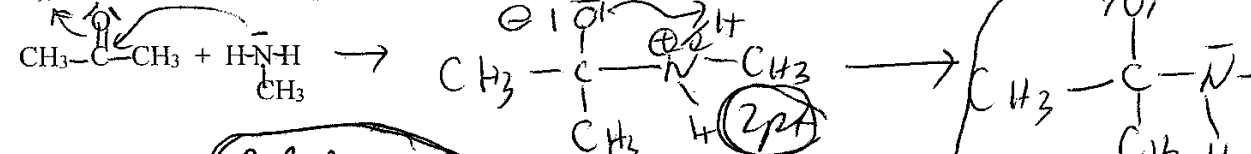
Sign Name Key (NFE = not far) Print Name (left off OK)

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

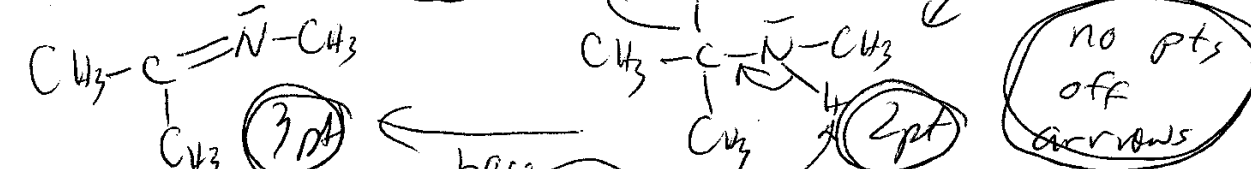
1. Complete the following reactions by giving the organic products. (Circle the number of 4 of the following reactions you want graded.) (4 pts each reaction, 16 pts)



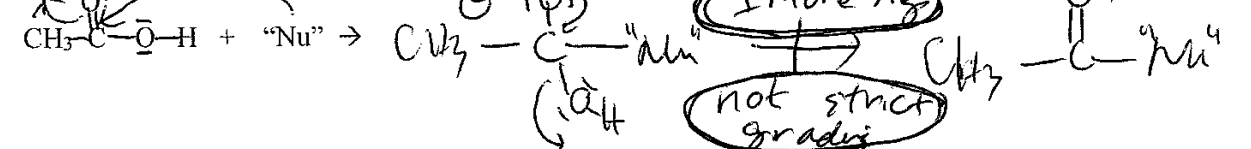
2. Show the following reaction mechanism (limit: complex nucleophilic addition reaction mechanism (type B), OK to move H<sup>+</sup> from part of molecule to another part of molecule) (9 pts)



BBA - bad bad attempt



Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following. (2 pts)



Sign Name Kery

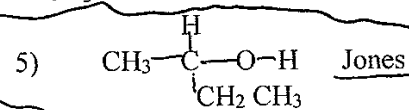
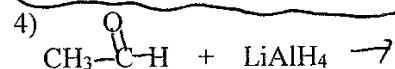
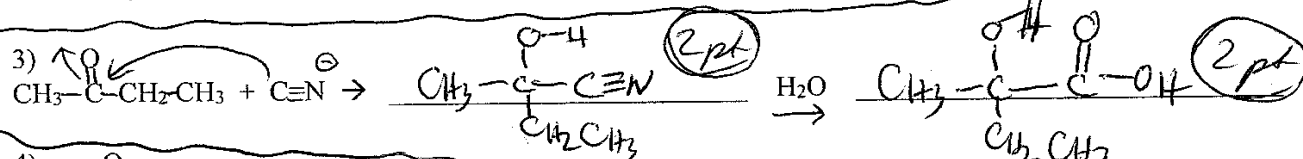
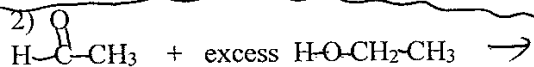
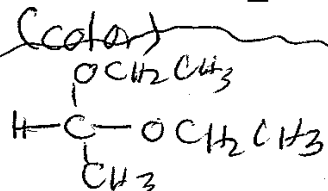
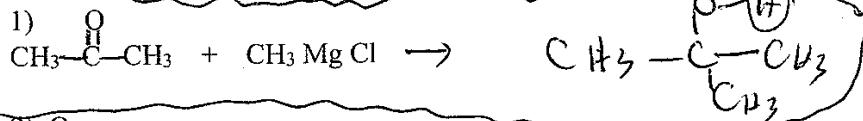
(left off ok)

Print Name

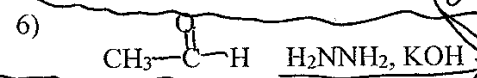
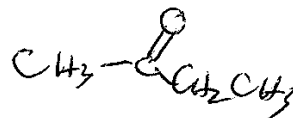
NFE = not far enough

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

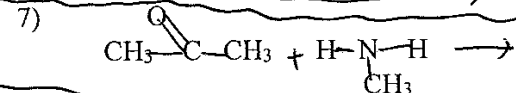
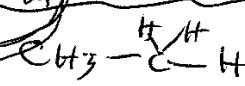
1. Complete the following reactions by giving the organic products. (Circle the number of 4 of the following reactions you want graded.) (4 pts each reaction, 16 pts)



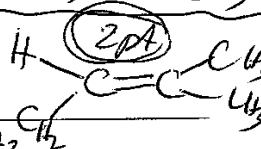
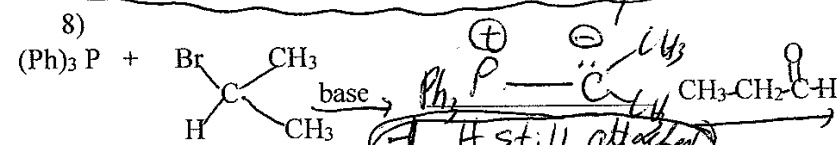
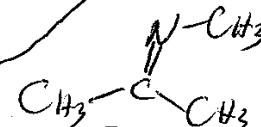
regio or intermediate



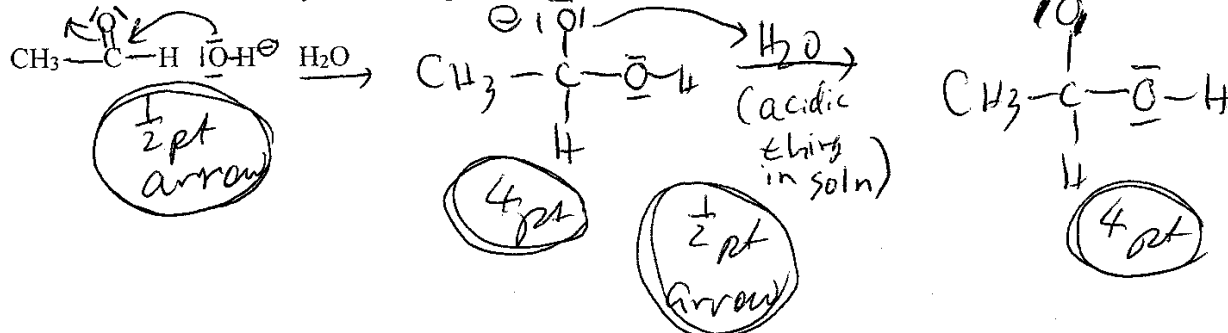
-2



(2 pt)



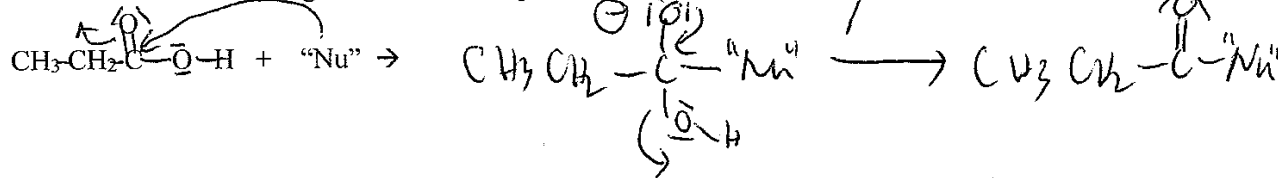
2. Show a base catalyzed Nucleophilic Addition Reaction Mechanism. (9 pts)



BBA - bad bad attempt

really 1 more step not strict gradus

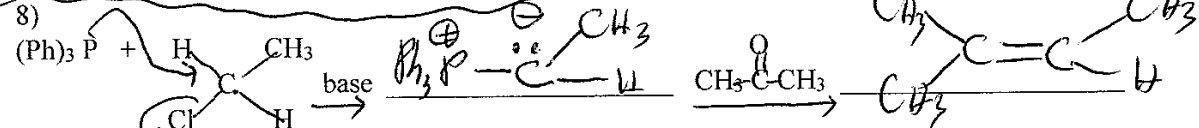
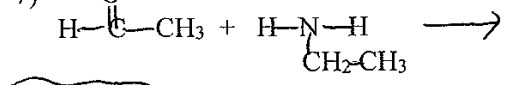
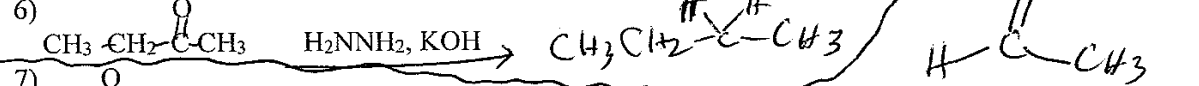
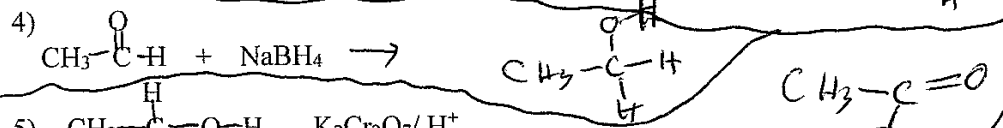
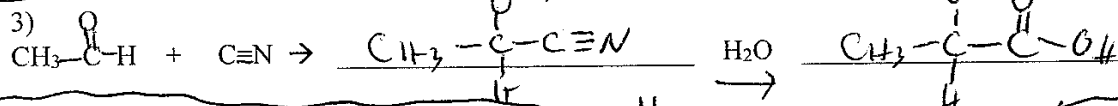
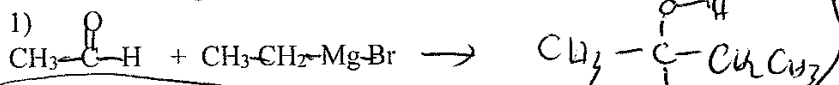
Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following. (2 pts)



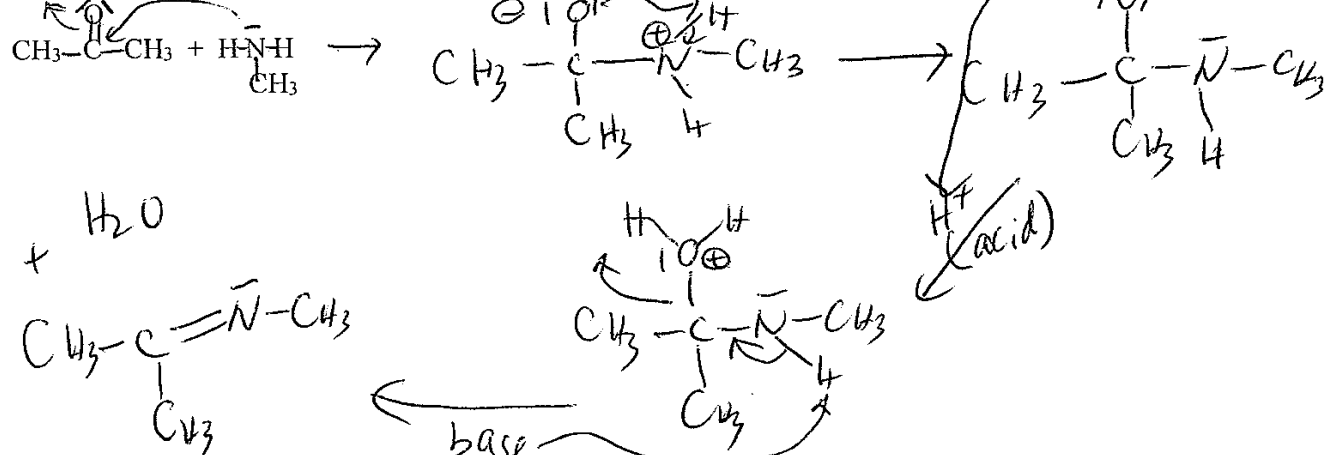
Sign Name Key Print Name \_\_\_\_\_

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

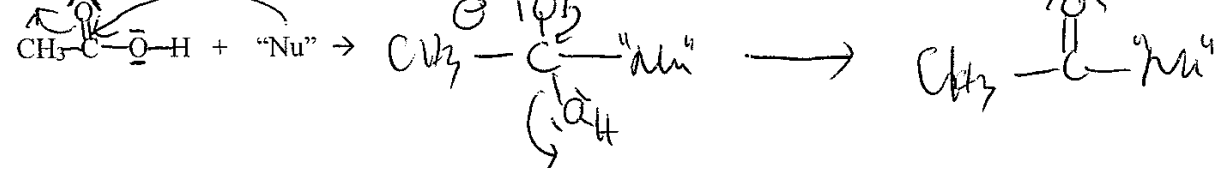
1. Complete the following reactions by giving the organic products. (Circle the number of 4 of the following reactions you want graded.) (4 pts each reaction, 16 pts)



2. Show the following reaction mechanism (hint: complex nucleophilic addition reaction mechanism (type B), OK to move H<sup>+</sup> from part of molecule to another part of molecule) (9 pts)



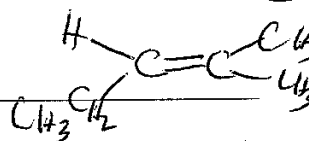
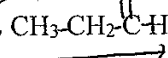
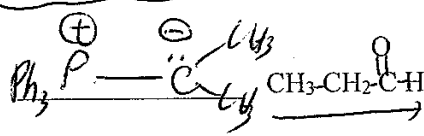
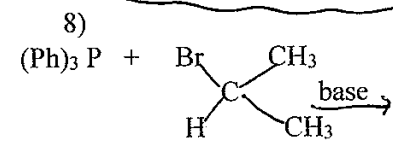
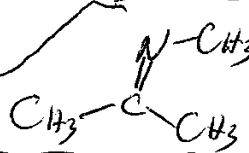
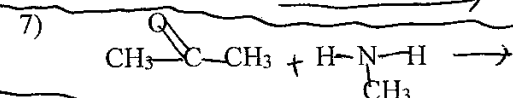
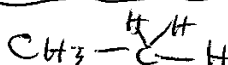
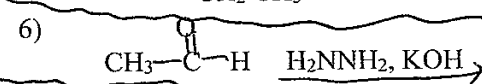
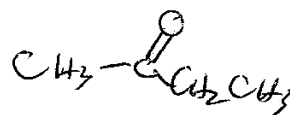
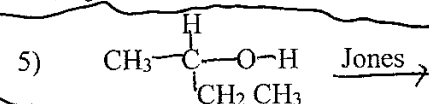
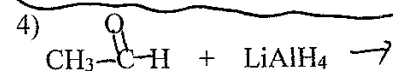
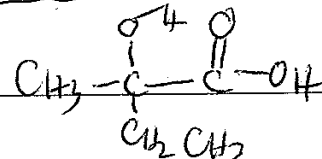
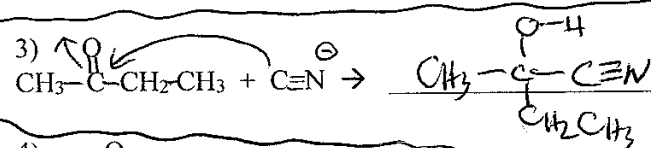
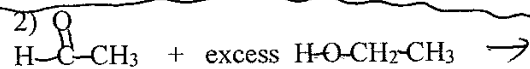
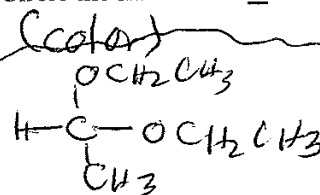
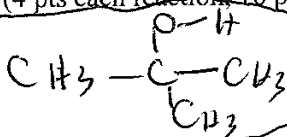
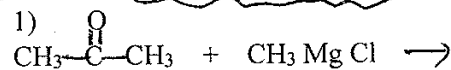
Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following. (2 pts)



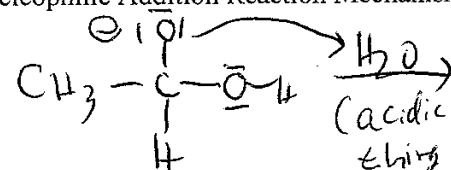
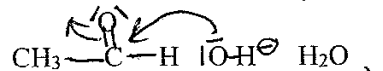
Sign Name Kelly Print Name \_\_\_\_\_

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

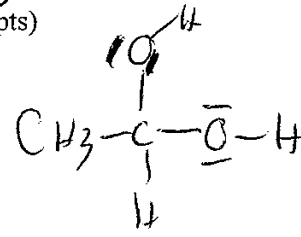
1. Complete the following reactions by giving the organic products. (Circle the number of 4 of the following reactions you want graded.) (4 pts each reaction, 16 pts)



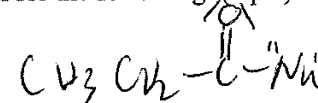
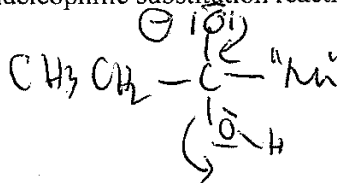
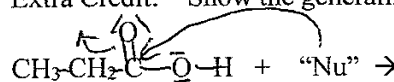
2. Show a base catalyzed Nucleophilic Addition Reaction Mechanism. (9 pts)



(acidic OH in soln)



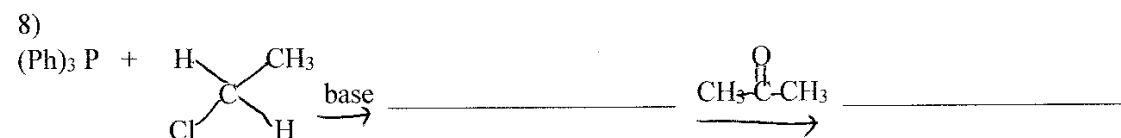
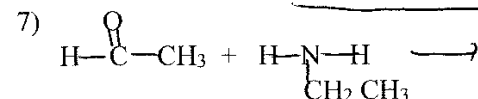
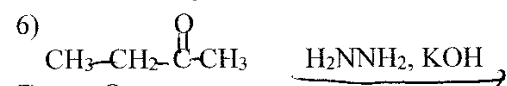
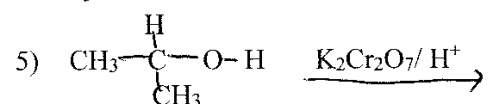
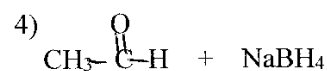
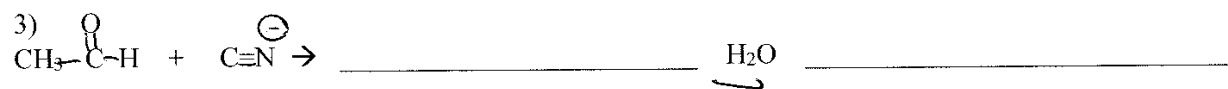
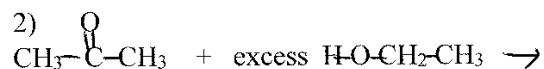
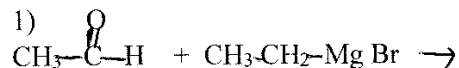
Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following. (2 pts)



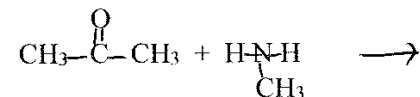
Sign Name \_\_\_\_\_ Print Name \_\_\_\_\_

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

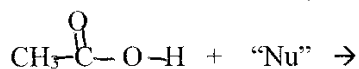
1. Complete the following reactions by giving the organic products. (Circle the number of **4** of the following reactions you want graded.) (4 pts each reaction, 16 pts)



2. Show the following reaction mechanism (hint: complex nucleophilic addition reaction mechanism (type B), OK to move  $\text{H}^+$  from part of molecule to another part of molecule) (9 pts)



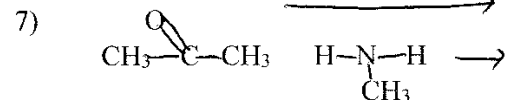
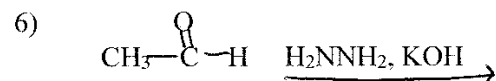
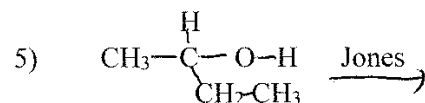
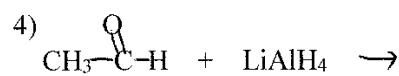
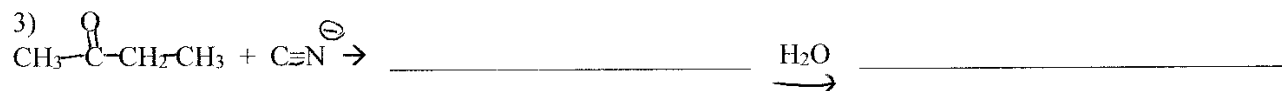
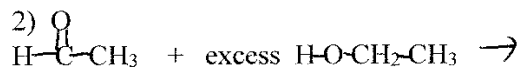
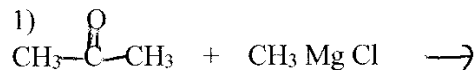
Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following..(2 pts)



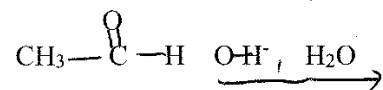
Sign Name \_\_\_\_\_ Print Name \_\_\_\_\_

Please show work on all questions for partial credit even on questions which do not specify. (25 pts)

1. Complete the following reactions by giving the organic products. (Circle the number of 4 of the following reactions you want graded.) (4 pts each reaction, 16 pts)



2. Show a base catalyzed Nucleophilic Addition Reaction Mechanism. (9 pts)



Extra Credit: Show the generalized nucleophilic substitution reaction mechanism for the following..(2 pts)

