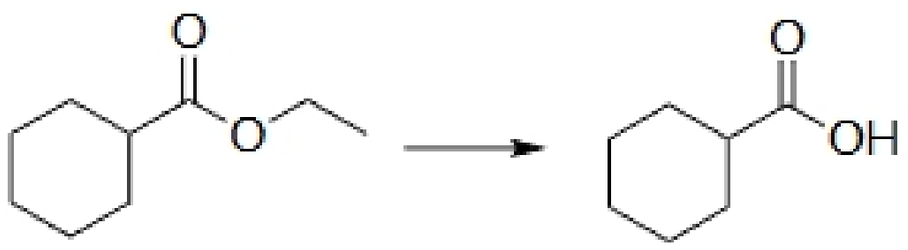
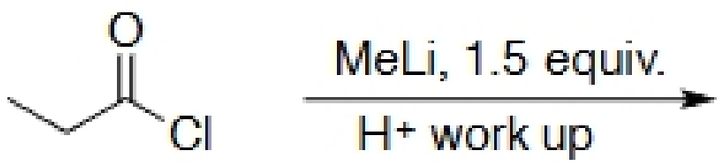
CHEM 343, Quiz 8

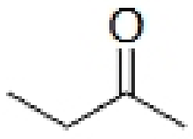
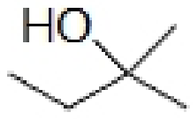
1. How could the reaction below be completed?



a. NaOH, H+ work up b. H+ 1%, H_2O c. 1. $SOCl_2$, pyridine 2. H_2O **d. a and b** e. a, b, and c

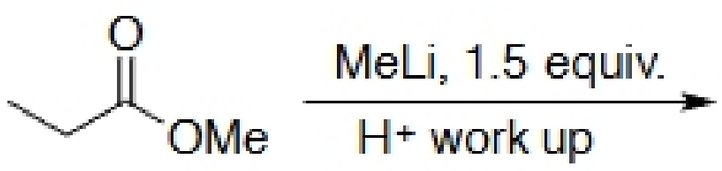
2. The product(s) of the reaction below would be:

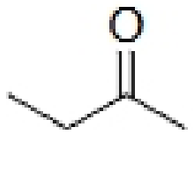
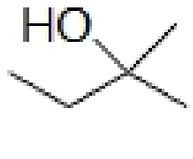


a.  b.  **c. a mixture of a and b**

d. a mixture of a and starting material e. a mixture of b and starting material

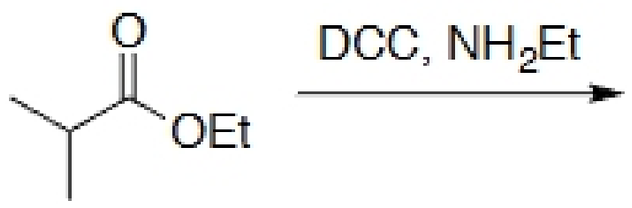
3. The product(s) of the reaction below would be:

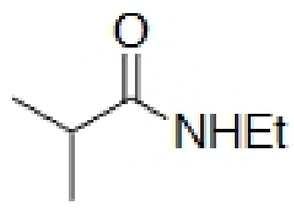
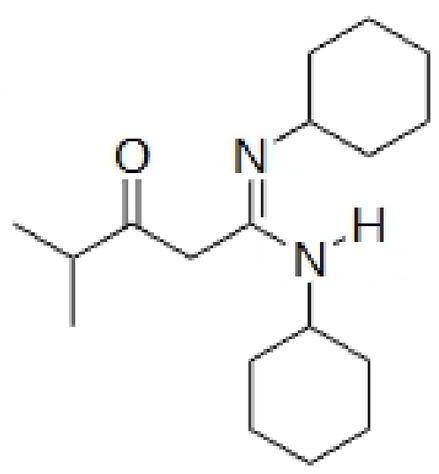
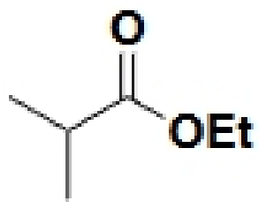
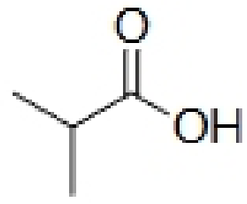


a.  b.  c. a mixture of a and b

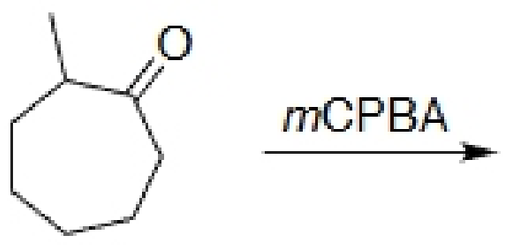
d. a mixture of a and starting material **e. a mixture of b and starting material**

4. The product of the reaction below would be:

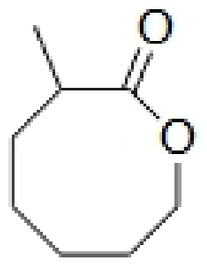


a.  b.  **c.**  d. 

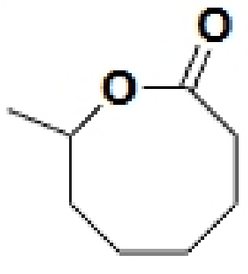
5. The product of the reaction below would be:



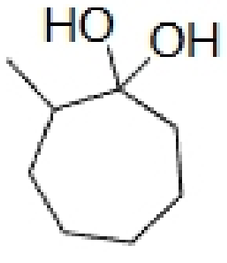
a.



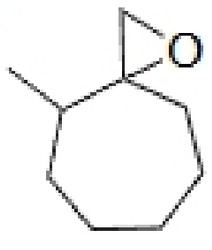
b.



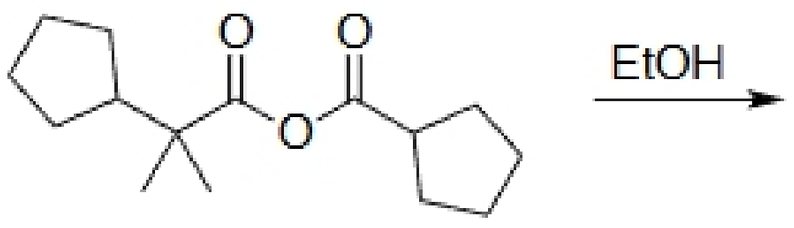
c.



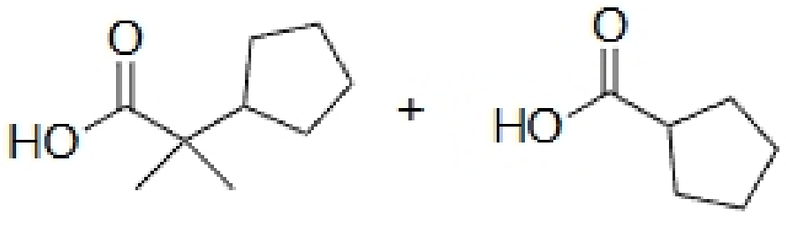
d.



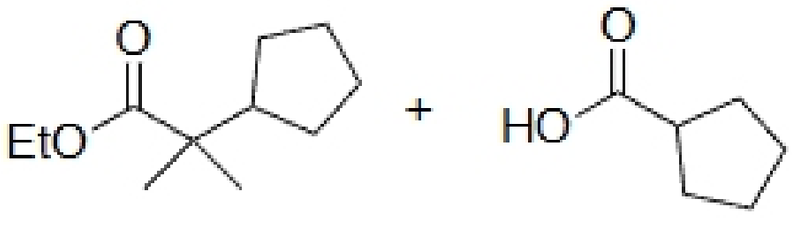
6. The products of the reaction below are:



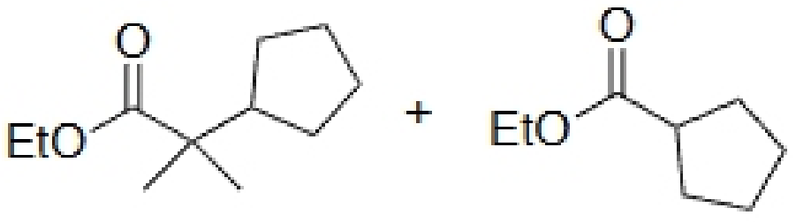
a.



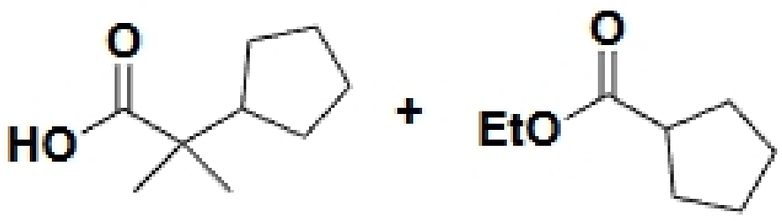
b.



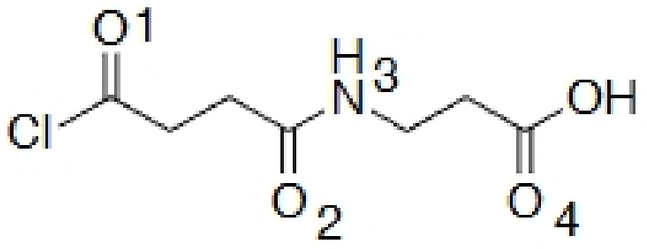
c.



d.



7. Put the atoms below in order of increasing basicity.

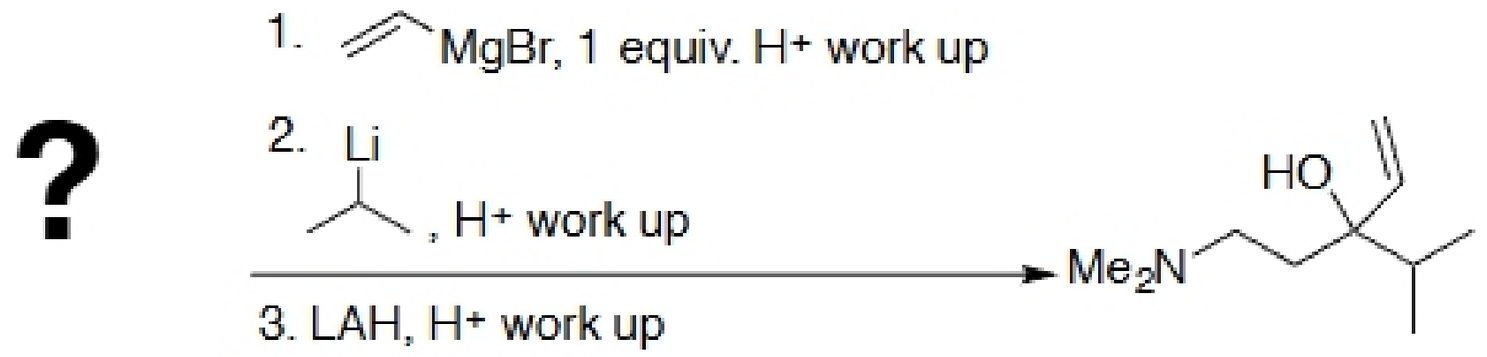


a. 3<1<4<2 b. 1<3<2<4 c. 4<2<1<3 d. 2<4<3<1

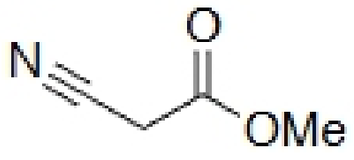
8. Select conditions to complete the synthesis below:

a. MeLi, 2 equiv., H+ work up **b. 1. EtMgBr, 1 equiv., H+ work up 2. MeLi, H+ work up**
c. 1. DIBAL, H+ work up 2. EtLi, H+ work up d. 1. MeLi, 1 equiv., H+ work up 2. DIBAL, H+ work up

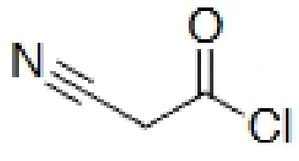
9. Select the appropriate starting material for the reaction below.



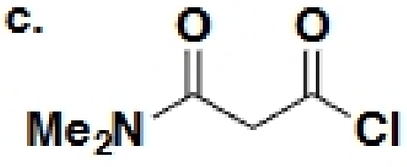
a.



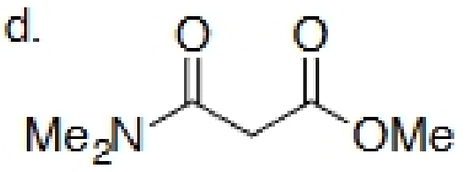
b.



c.



d.



10. Which of the following chemical compounds should you accept while Trick-or-Treating?

a. fructose b. cinnamaldelyde c. glycerol **d. all of the above**