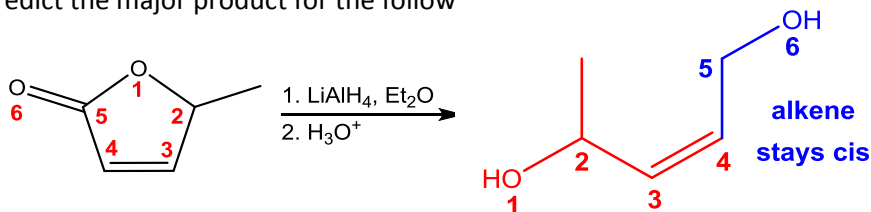
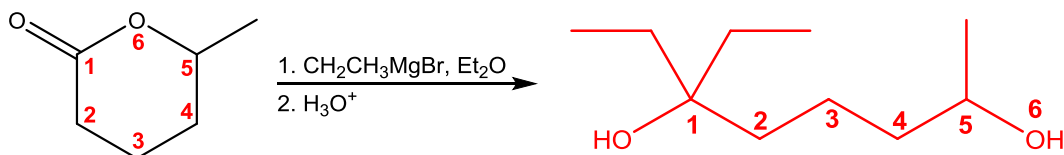


Ex. 1: Predict the major product for the follow

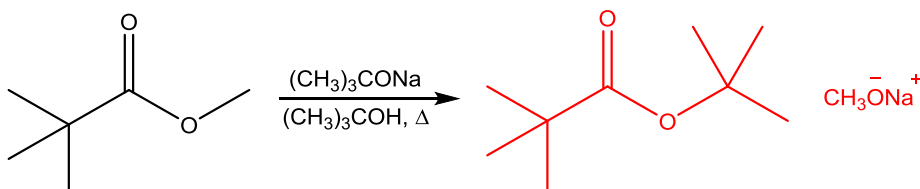
a)



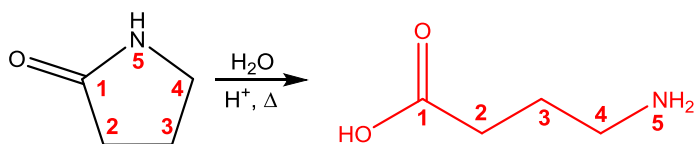
b)



c)

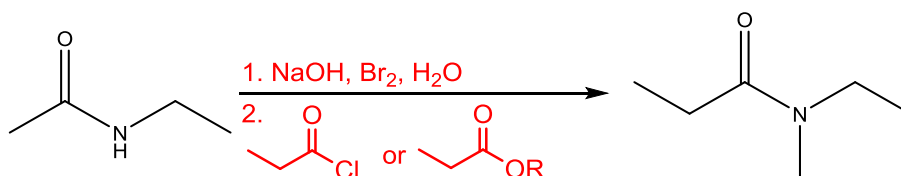


d)

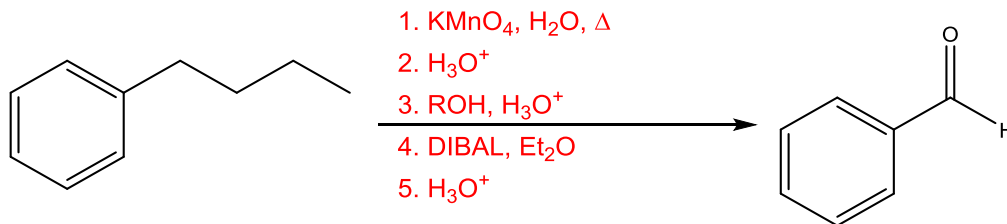


Ex. 2: Propose a synthesis for the following transformations:

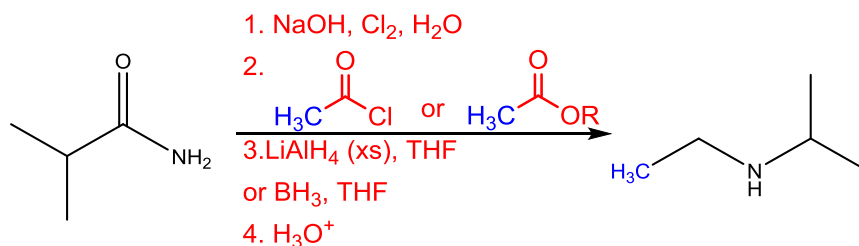
a)



b)

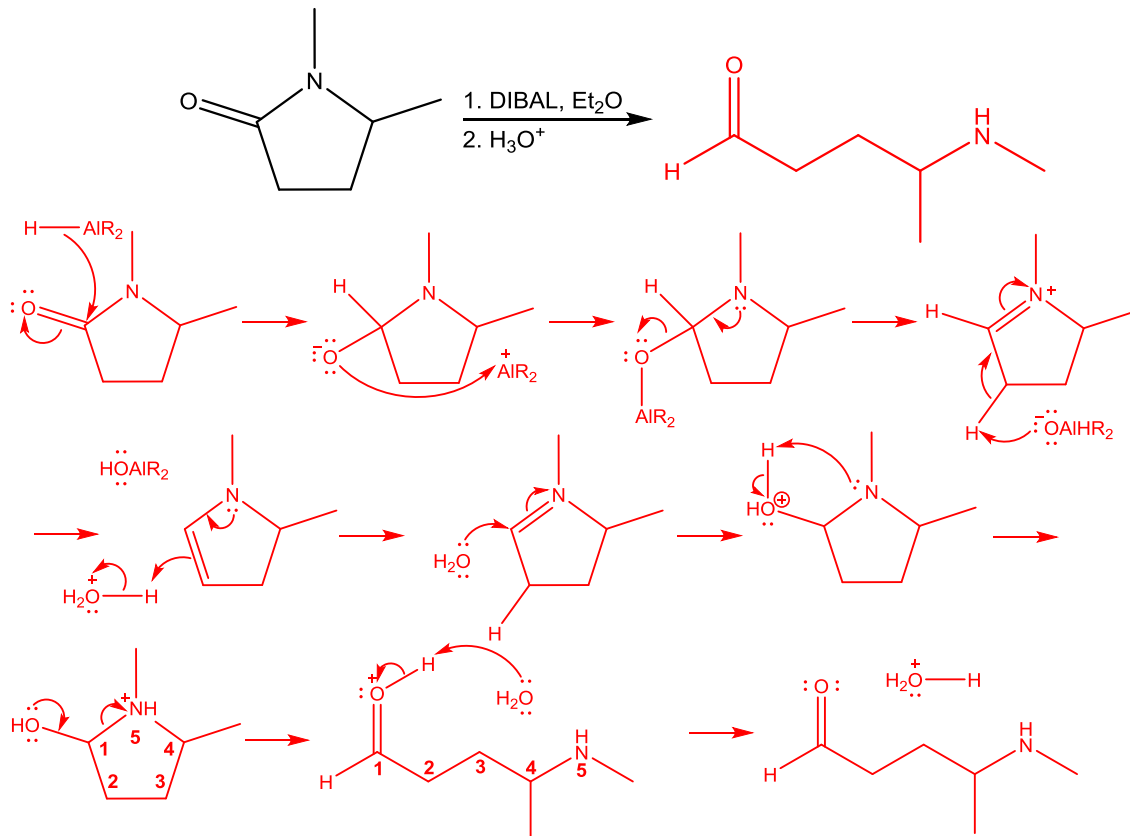


c)

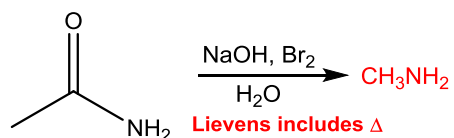


Ex. 3: Predict the products and propose a mechanism for the following transformations:

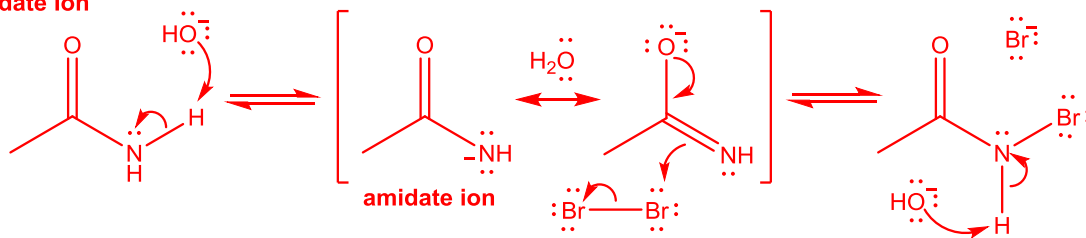
a)



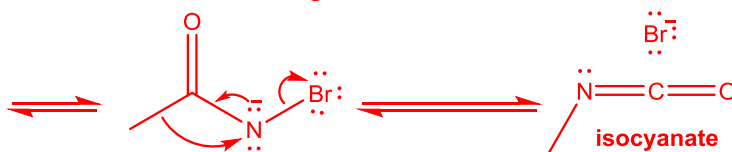
b) **Lievens mechanism**



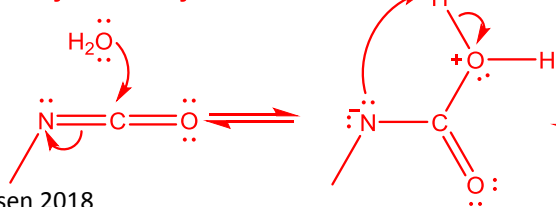
1. Amidate Ion



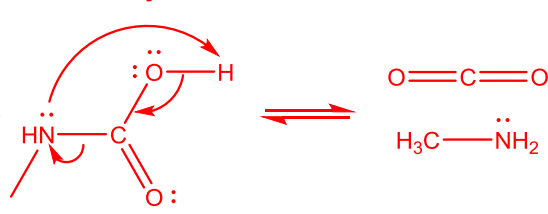
2. Push-Pull Rearrangement



3. Hydrate Isocyanate



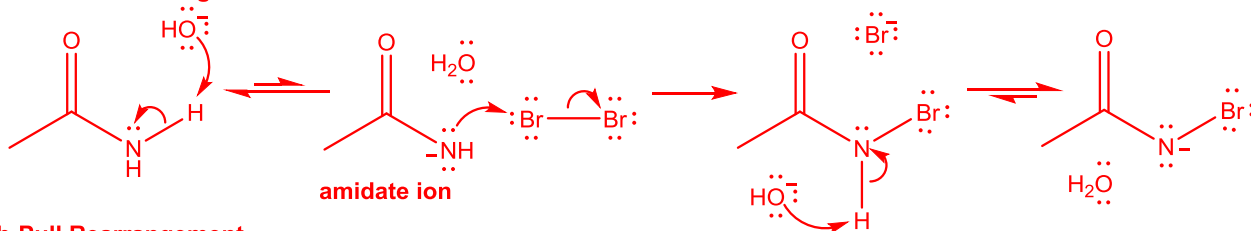
4. Decarboxylation



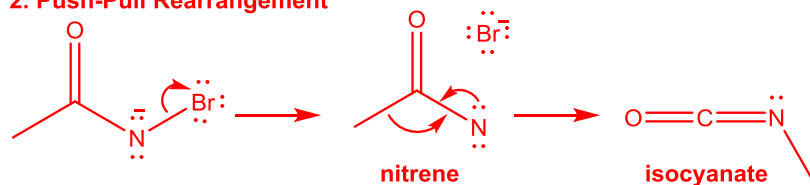
## Alternative to Ex. 3b

## Nasiri mechanism

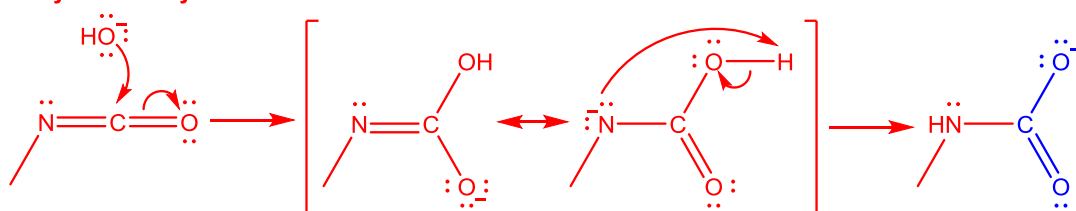
## 1. Amidate Ion and Halogenation



## 2. Push-Pull Rearrangement



## 2. Hydrate Isocyanate



## If you want side product to be:

