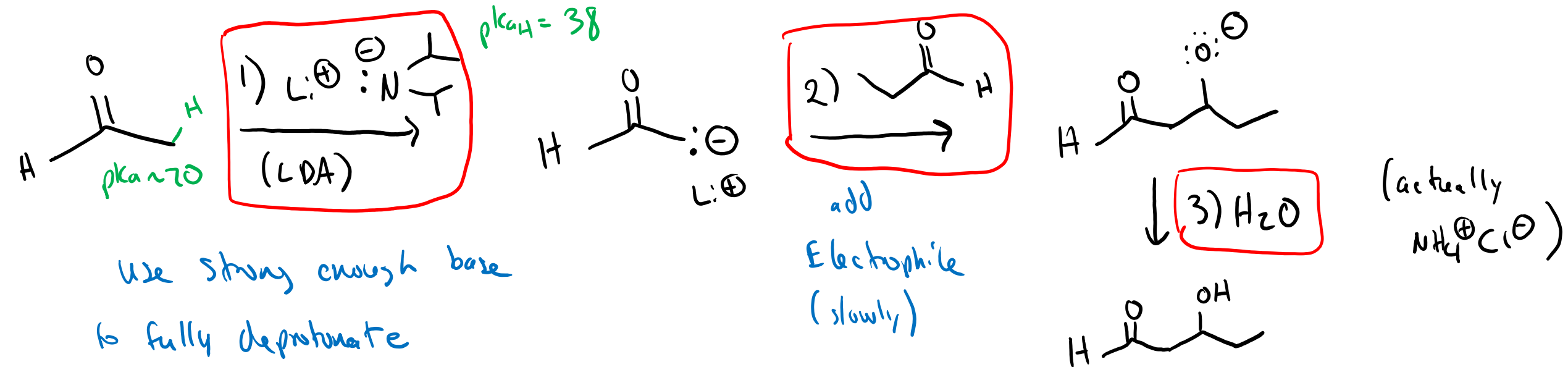
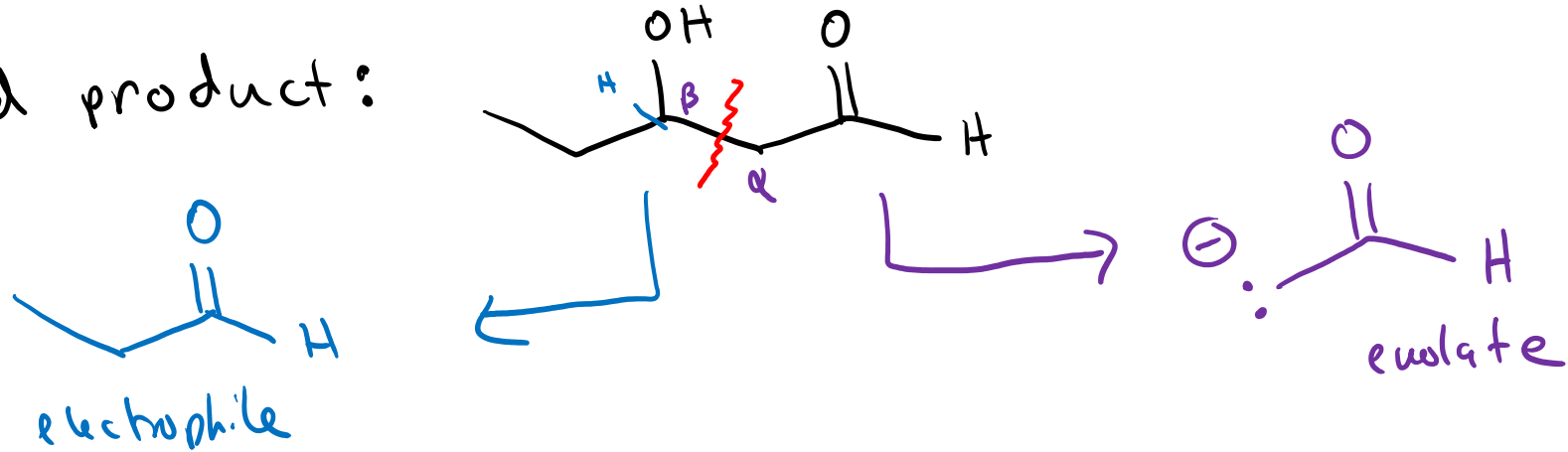


Aldol and Claisen Condensations

3/22/2022

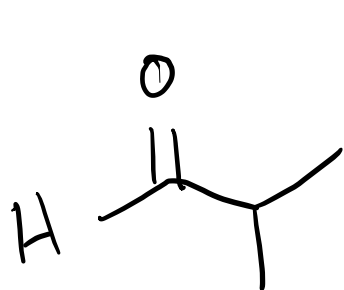
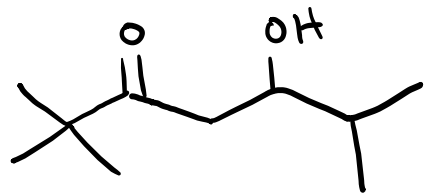
Crossed Aldol: Strategy → need to fully convert one of the ketones/aldehydes into an enolate, then add it to the other ketone/aldehyde - Stepwise rxn!

Desired product:

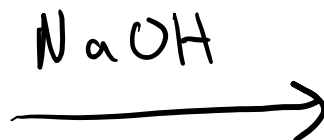
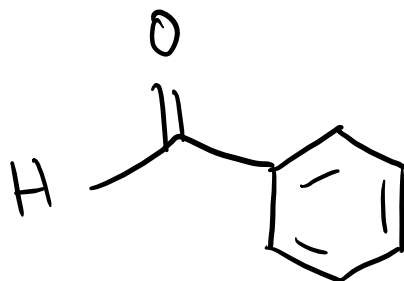


Crossed Aldol: Examples

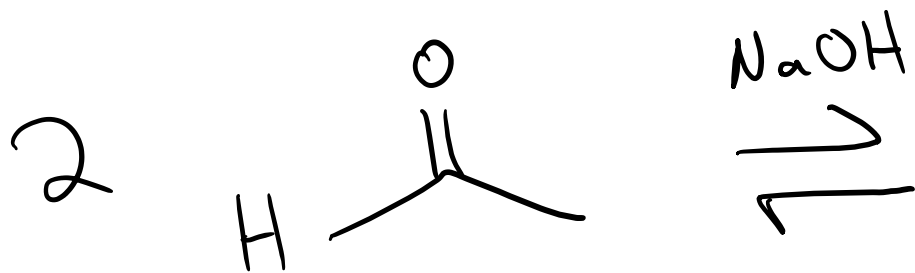
Desired Product:



+



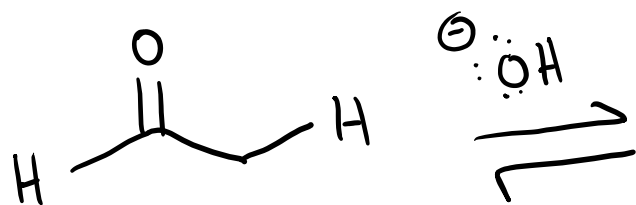
Aldol Condensation



overall:

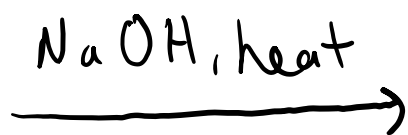
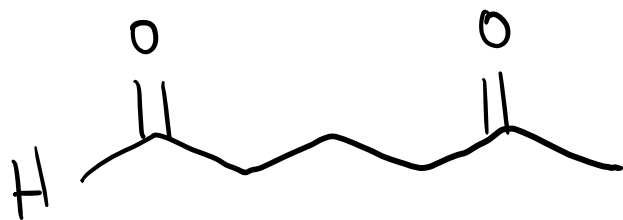


Aldol Condensation: Mechanism and Stereochemistry



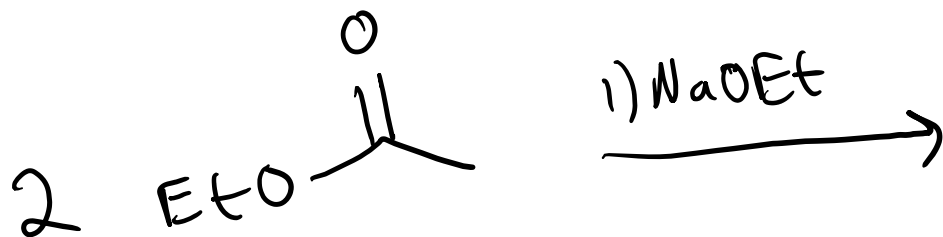
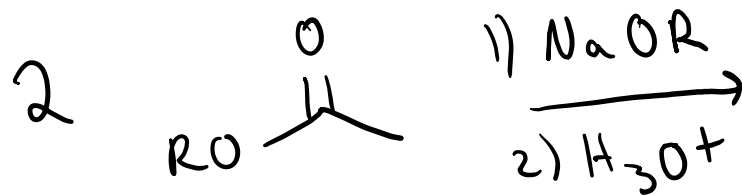
Intramolecular Aldol Condensation

(21.3)

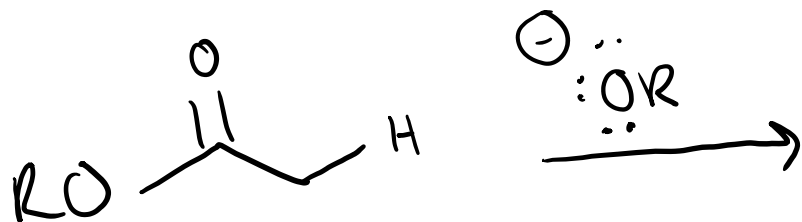
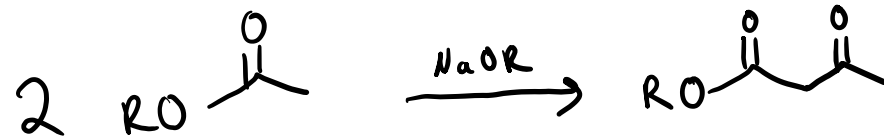


Claisen Condensation

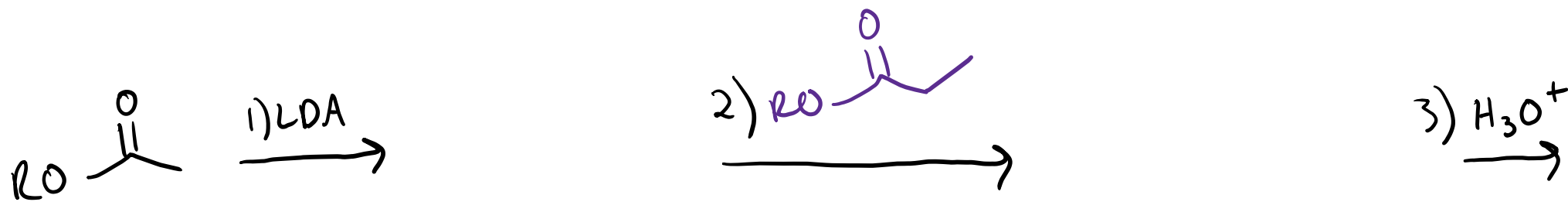
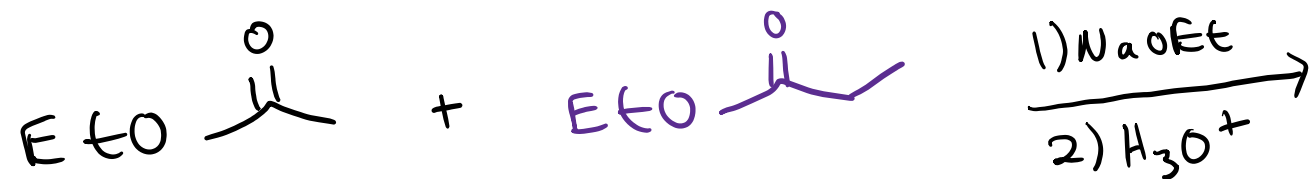
(21.4)



Claisen Condensation: Mechanism



Crossed Claisen (or mixed Claisen)



or, if one reactant has no α -protons

