

Ch 22

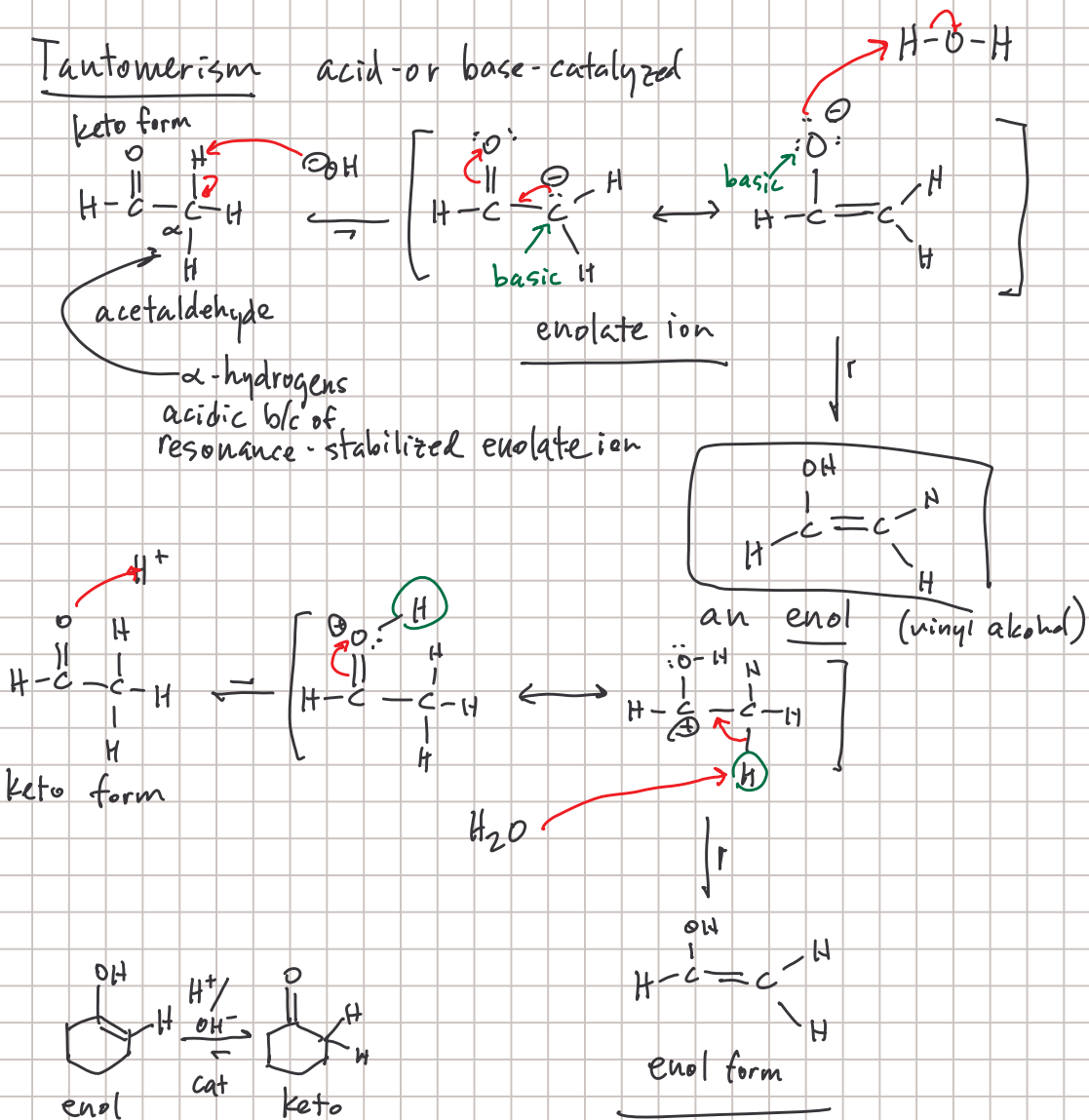
condensations / α -carbon substitutions

Note Title

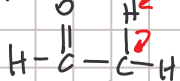
4/19/2006

Wittig report due Tues

Tautomerism acid- or base-catalyzed



keto form

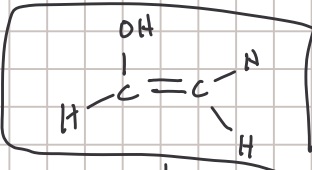


acetaldehyde

α -hydrogens acidic b/c of resonance-stabilized enolate ion

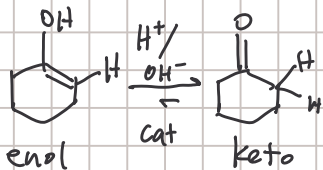
enolate ion

keto form



an enol (vinyl alcohol)

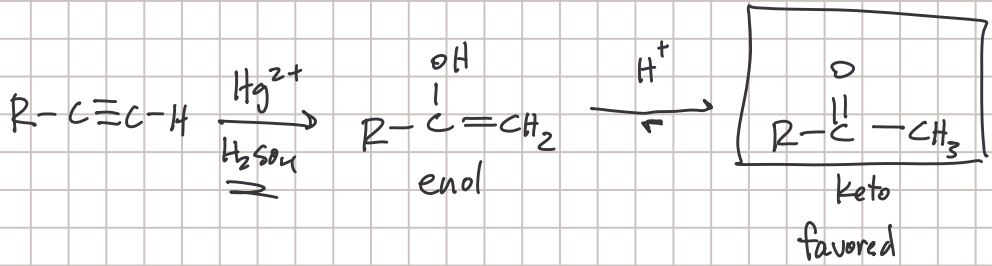
enol form

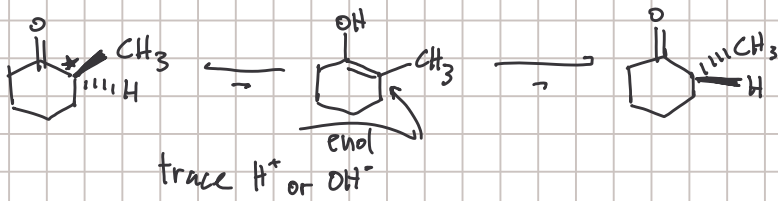


enol

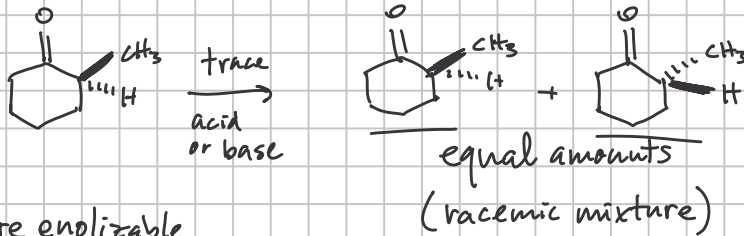
keto

usu. more stable (favored in eq.)





racemization

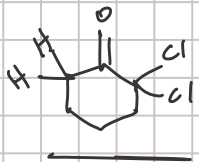
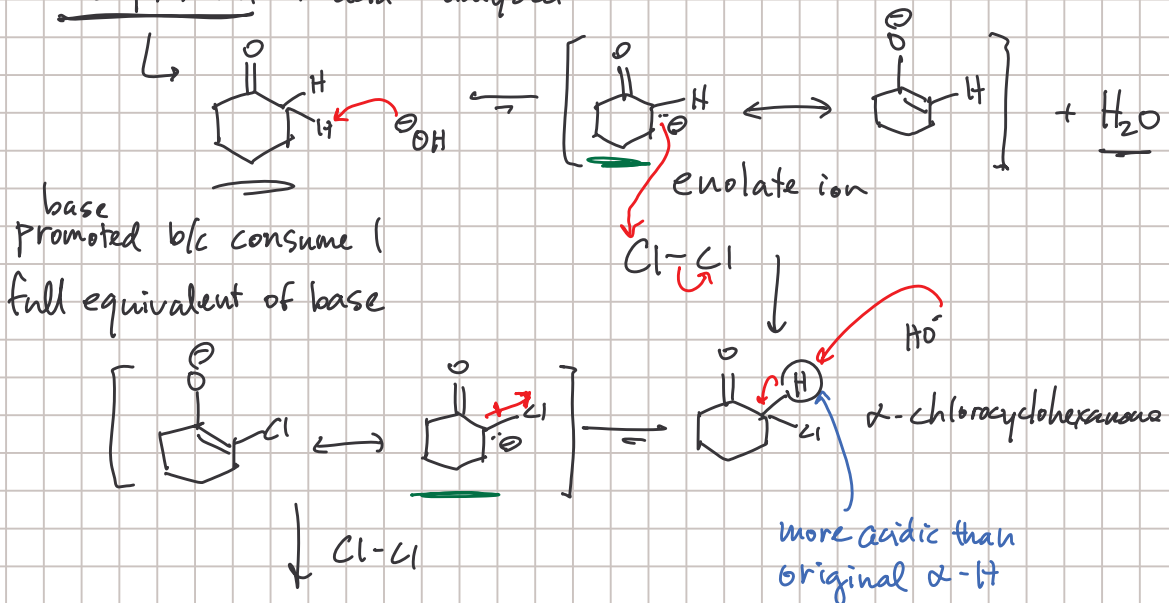


α H's are enolizable

α -halogenation

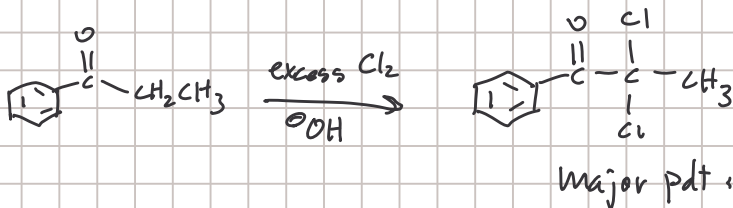


base-promoted or acid-catalyzed

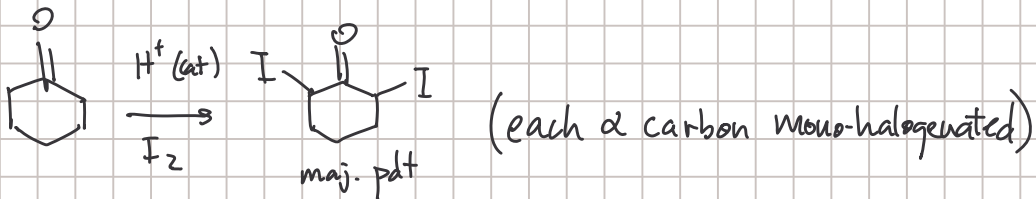
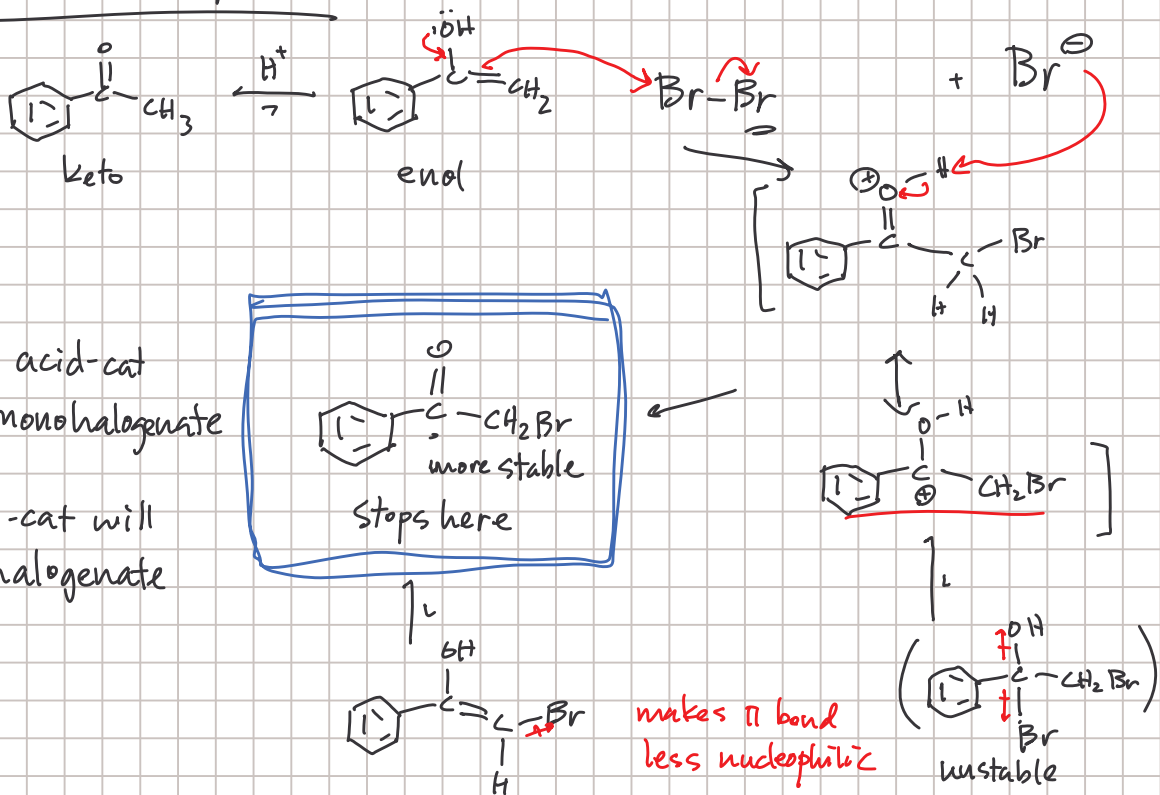


w/ base-promoted mech, multiple-halogenation is common

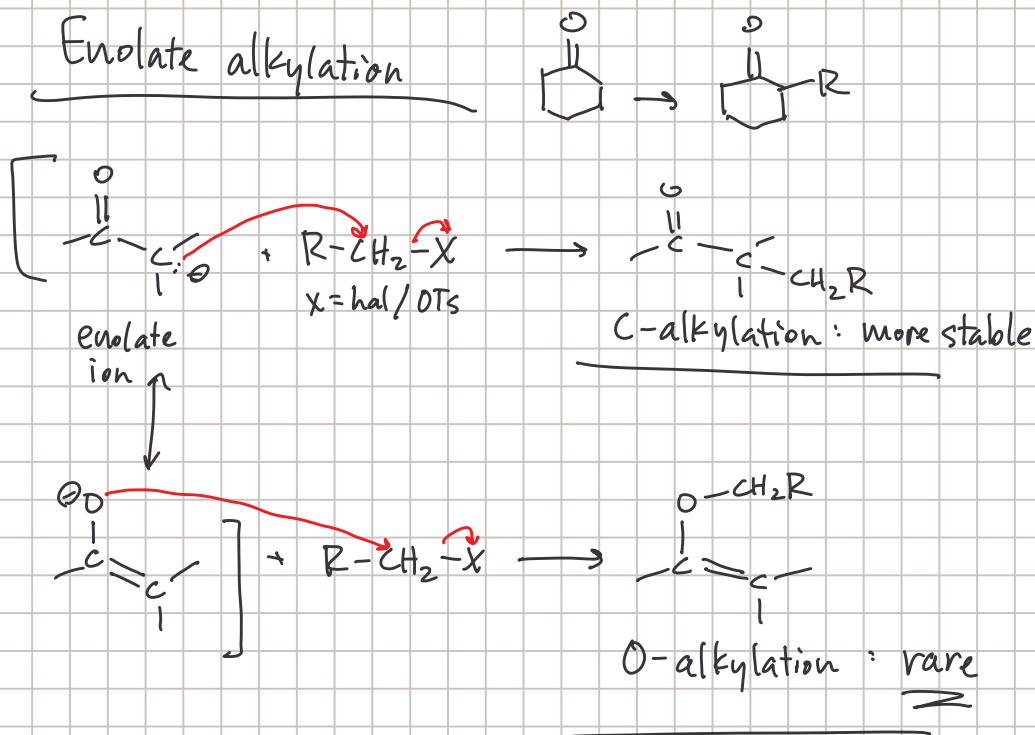
+ other poly-halogenated structures



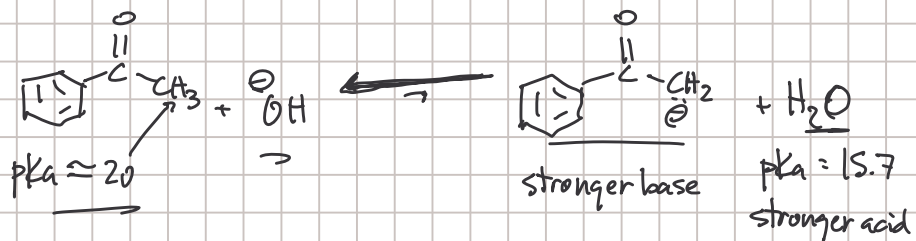
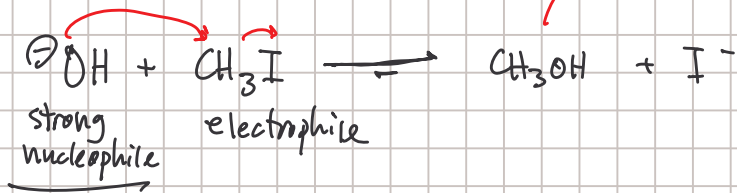
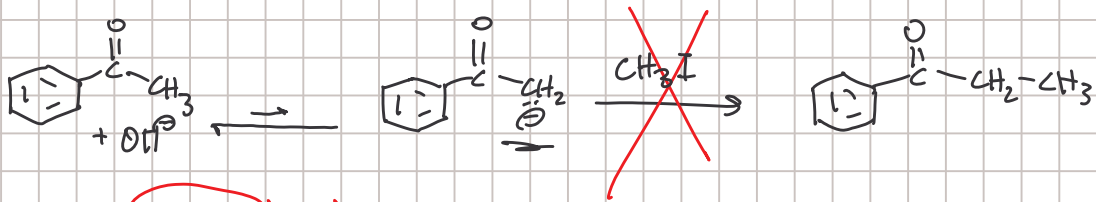
acid-cat. halogenation



Enolate alkylation



* cannot use $\ominus\text{OH}$ or $\ominus\text{OR}$ to make enolate.



need: stronger base to favorably make enolate

: non-nucleophilic base (so it won't attack electrophile)



LDA
lithium diisopropyl amide (also an amide)

