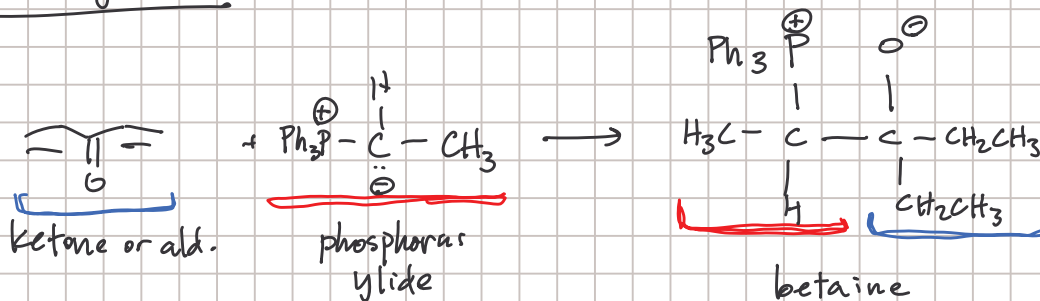


Ch 18

Note Title

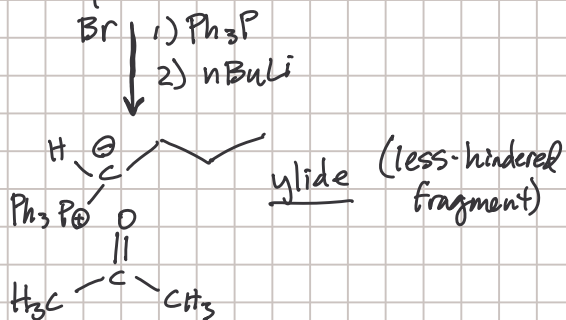
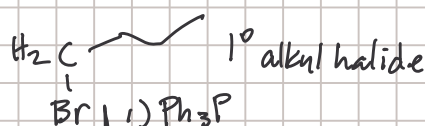
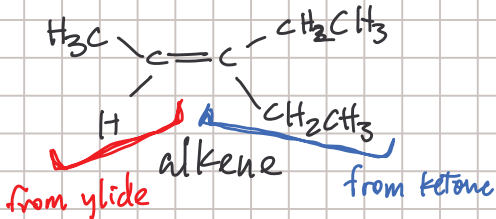
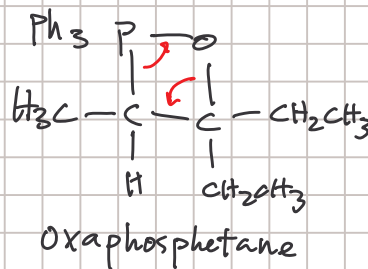
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Wittig Rxn

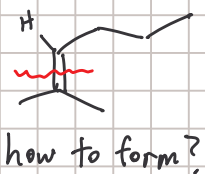


$\text{Ph}_3\text{P}=\text{O}$
triphenylphosphine oxide

ring collapse

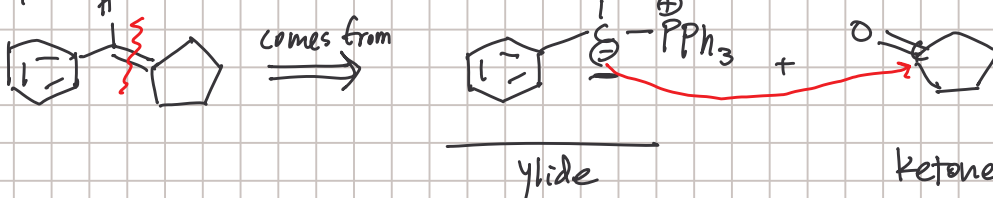


new bond

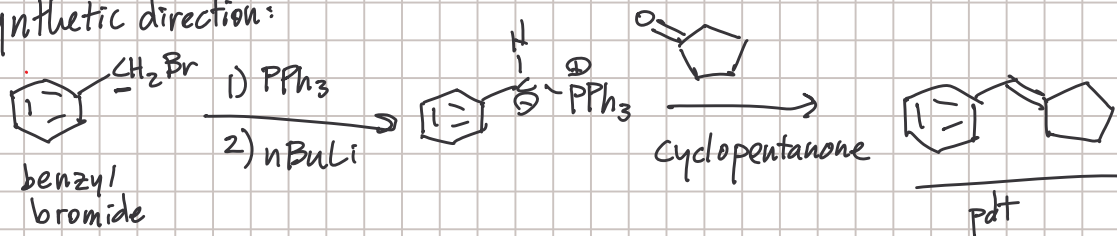


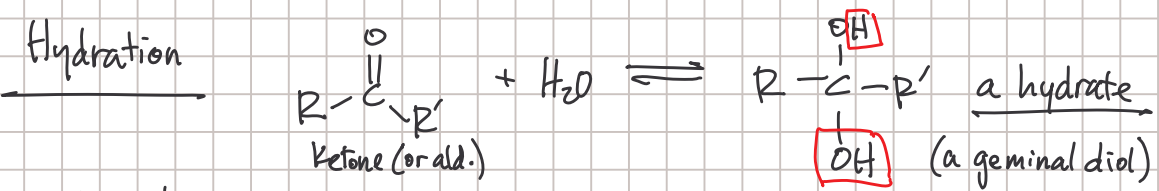
"comes from"
retrosynthetic arrow

retrosynthetic analysis:

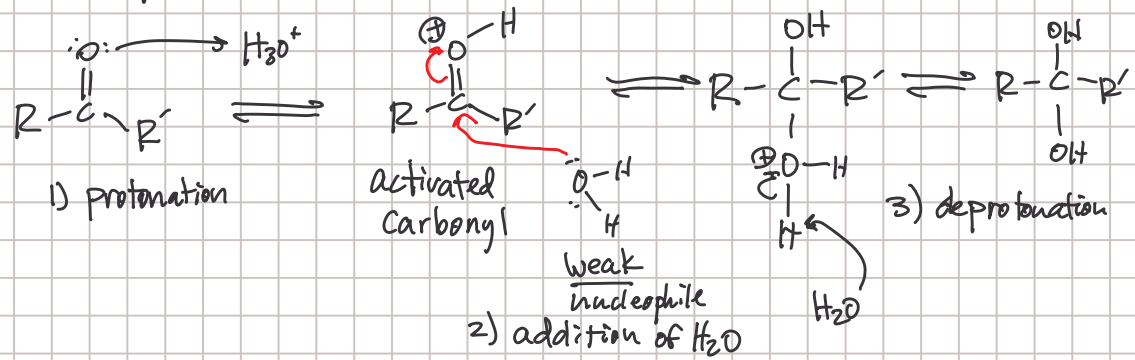


synthetic direction:

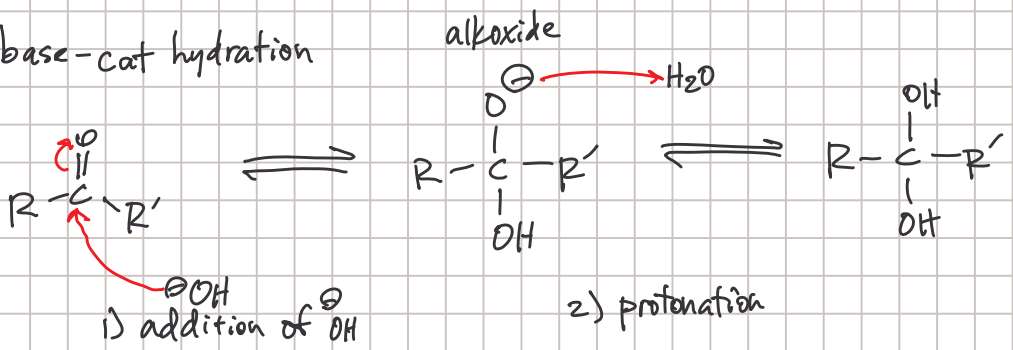




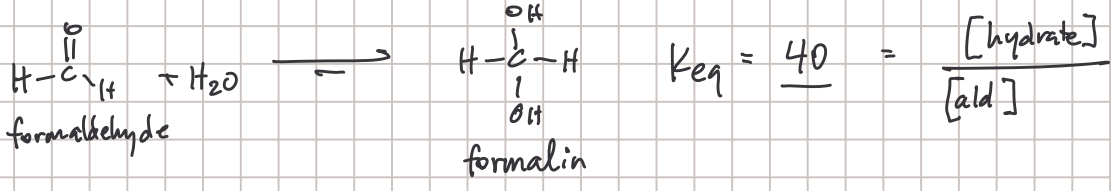
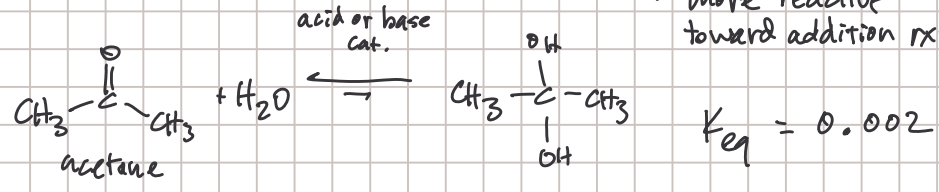
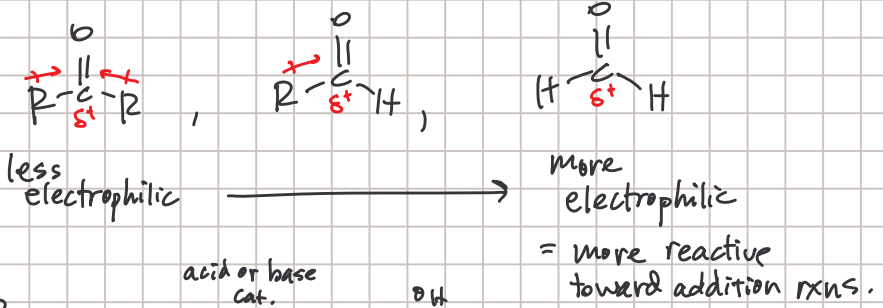
acid-cat hydration:



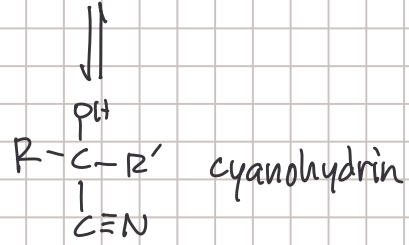
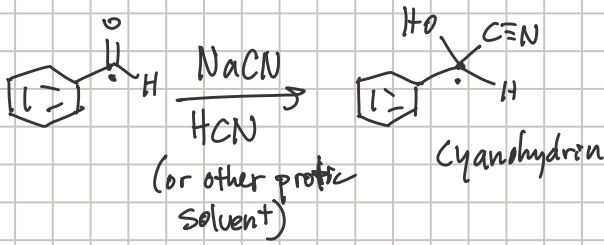
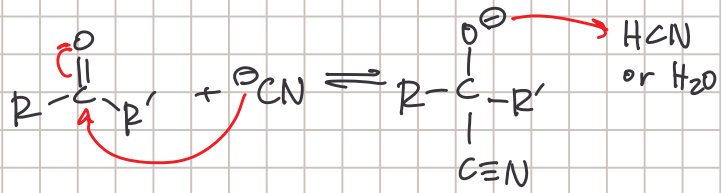
base-cat hydration



hydration is reversible (equilibrium)

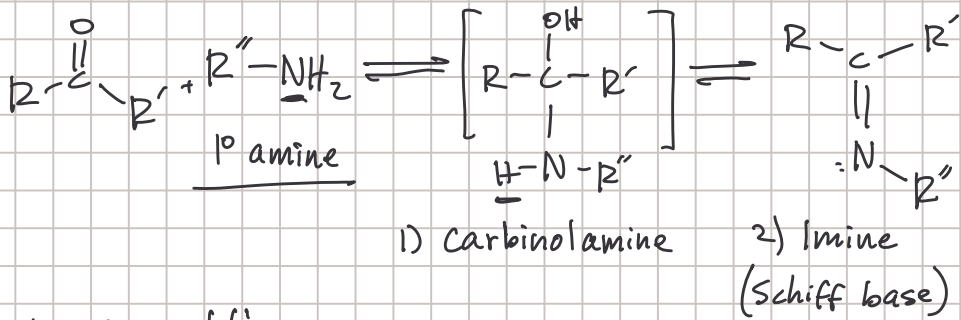


Cyanohydrins

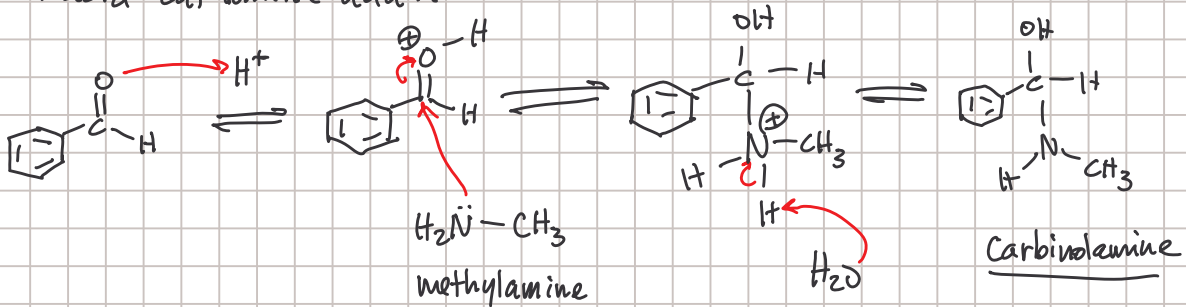


bulky ketones < ketones < aldehydes < formaldehyde
 slow (sterics) (fastest)
 poor yield (low K_{eq})

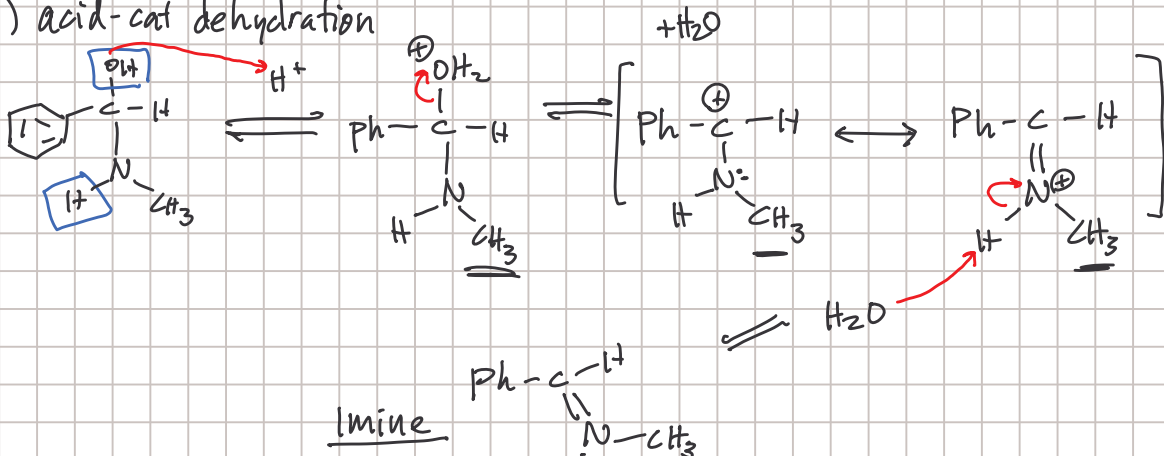
Imines

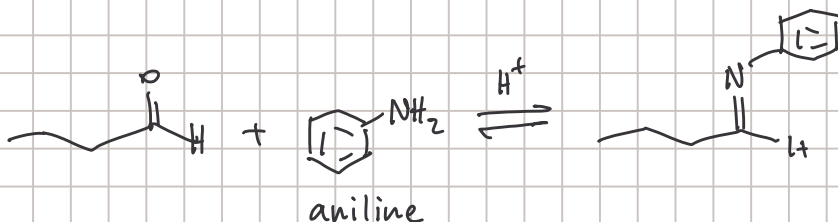
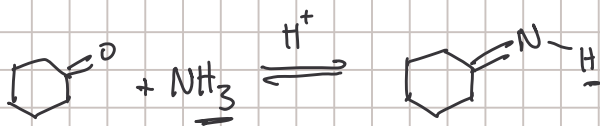
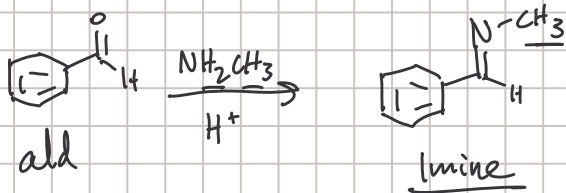


1) acid-cat amine add'n



2) acid-cat dehydration





derivatives

ketone/ald \rightarrow imine (solid)

record melting point

different
 \geq groups
 make:

{
 oxime
 hydrazone
 phenylhydrazone
 semicarbazone

