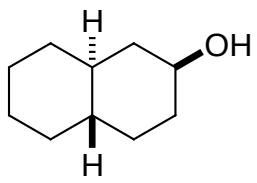
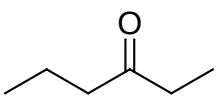
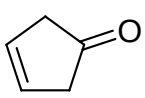
Chem 212
Aldehyde and ketone problems 2



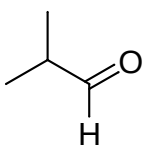
CrO_3, H_2SO_4 →



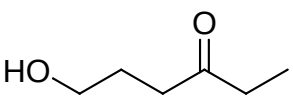
$CH_3CH_2CH_2NH_2$ →
pH = 4.5



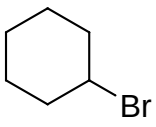
H_2, Pd/C →



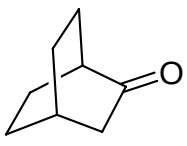
CrO_3, H_2SO_4 →



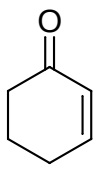
MeOH →
H^+ catalyst



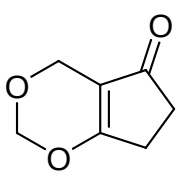
1) PPh_3 →
2) nBuLi
3) acetone



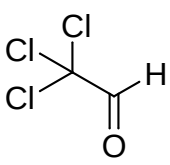
NH_2NH_2, KOH →



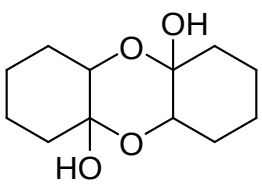
$NaBH_4$ →
EtOH



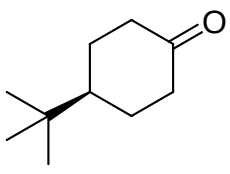
H^+, H_2O →



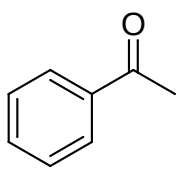
H^+, H_2O →



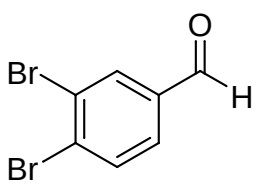
H^+, H_2O →



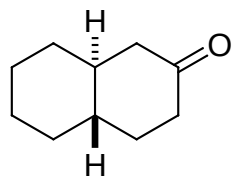
1) $LiAlH_4$ →
2) H^+, H_2O



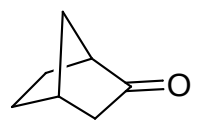
HS SH →
$ZnCl_2$



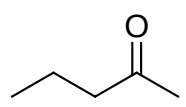
CrO_3 →
H_2SO_4



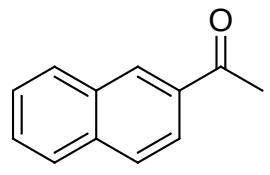
1) EtMgBr →
2) H_3O^+



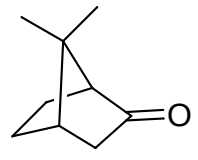
HO OH →
H^+ catalyst



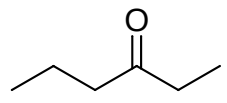
1) NH_2 pH 4.5 →
2) $NaBH_4$, MeOH



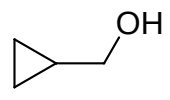
Zn/Hg →
HCl



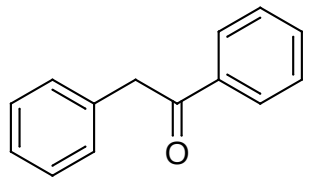
NH_2OH, H^+ →



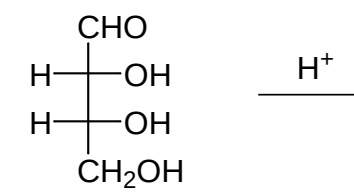
HCN, cat. NaOH →



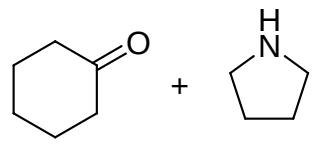
CrO_3, pyridine →



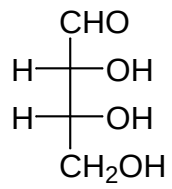
Me_2NH, H_2O →
pH 4.5



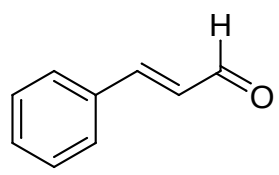
benzaldehyde →
pH 4.5



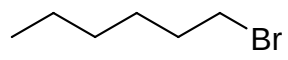
pH 4.5 →



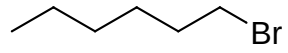
H^+ →



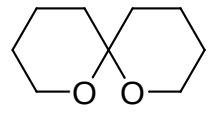
$Ph_3\overset{\oplus}{P}CH_2Ph$ →
KOH



1) Ph_3P →
2) nBuLi
3) propenal



1) Mg, ether →
2) propenal
3) H_3O^+



H_3O^+ →