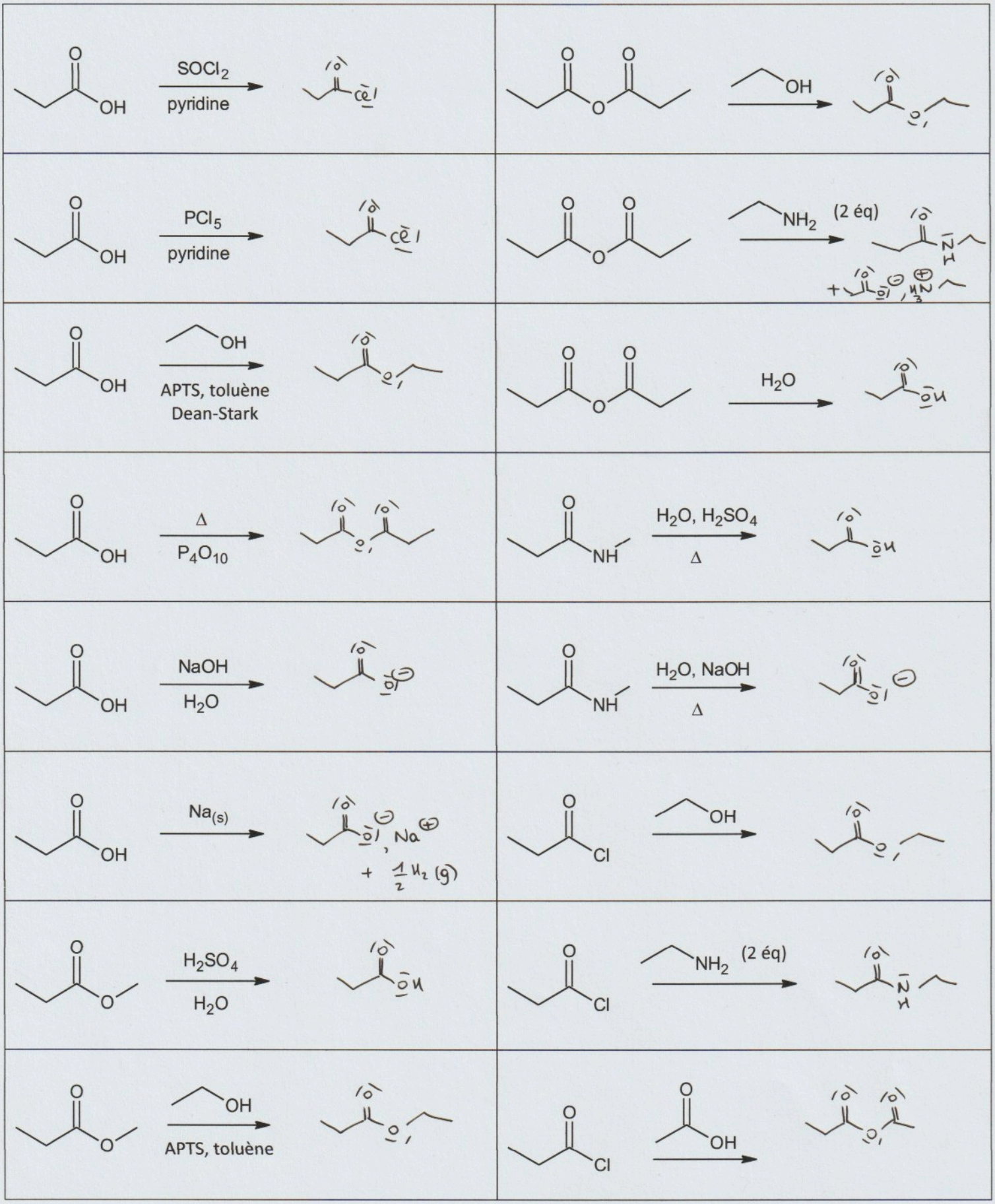
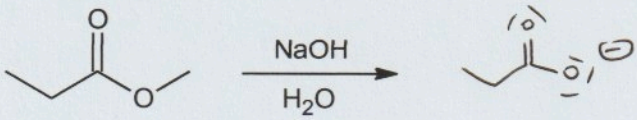
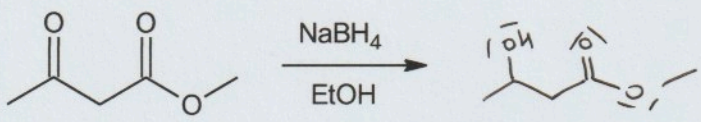
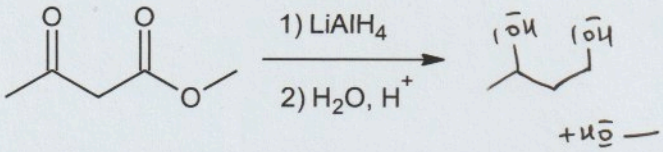
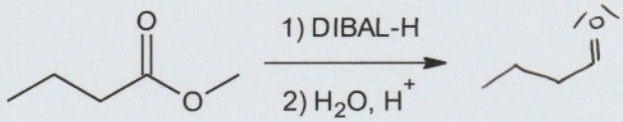
Soutien 5 : Chimie organique – PCSI – Chapitre O_1, O_2 et O_3

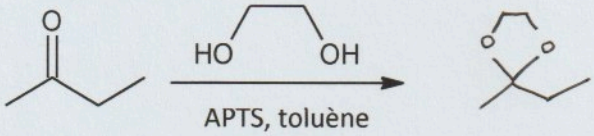


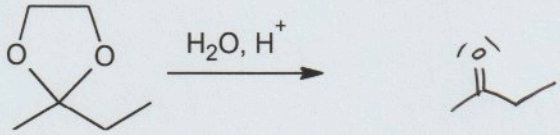

NaOH
H_2O

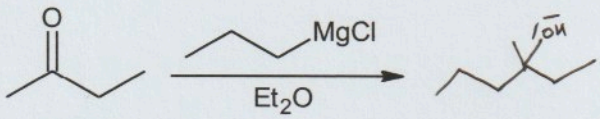

$NaBH_4$
EtOH

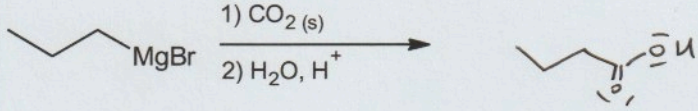

1) $LiAlH_4$
2) H_2O, H^+

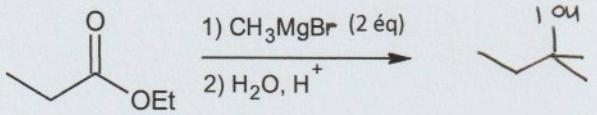

1) DIBAL-H
2) H_2O, H^+

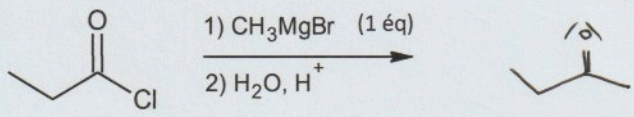

HO
OH
APTS, toluène
Dean-Stark

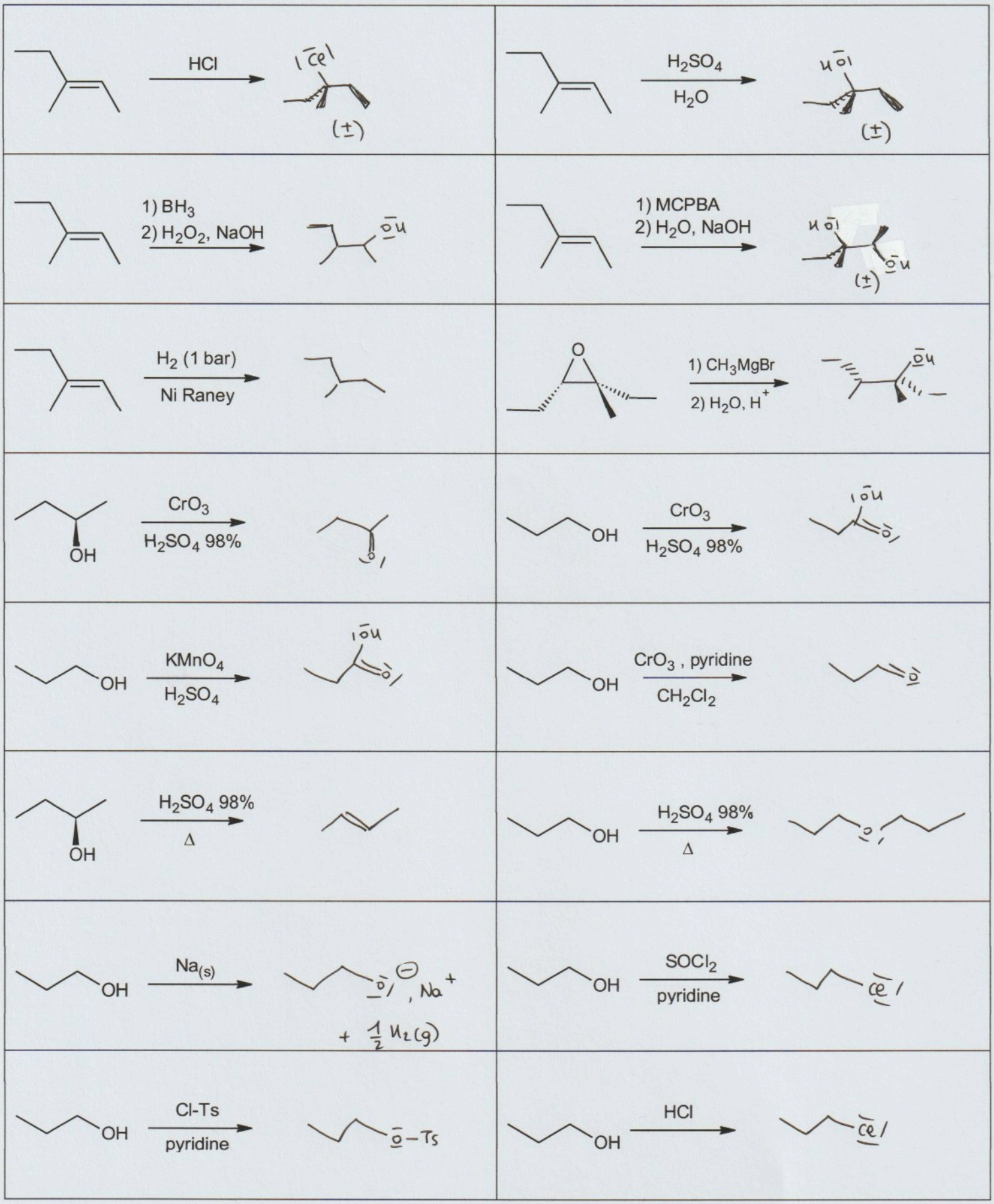

H_2O, H^+

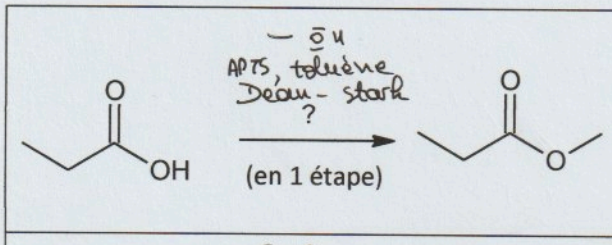

MgCl
Et_2O

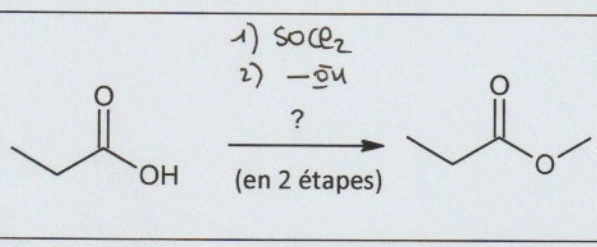

MgBr
1) CO_2 (s)
2) H_2O, H^+

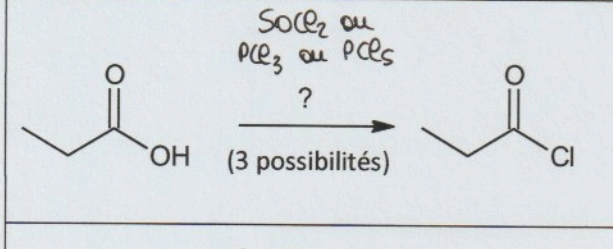

OEt
1) CH_3MgBr (2 éq)
2) H_2O, H^+

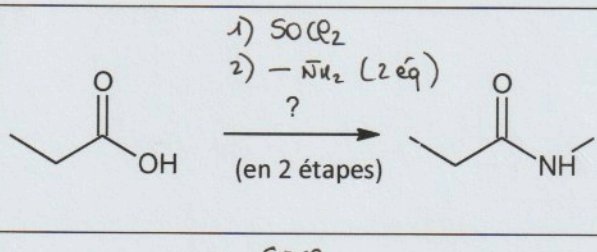

Cl
1) CH_3MgBr (1 éq)
2) H_2O, H^+

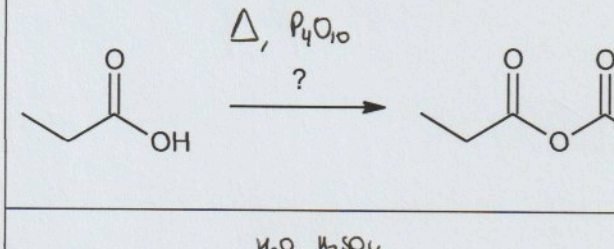

HCl
(±)
H_2SO_4
H_2O
(±)
1) BH_3
2) H_2O_2, NaOH
1) MCPBA
2) H_2O, NaOH
(±)
H_2 (1 bar)
Ni Raney
1) CH_3MgBr
2) H_2O, H^+
CrO_3
H_2SO_4 98%
OH
CrO_3
H_2SO_4 98%
OH
$KMnO_4$
H_2SO_4
OH
CrO_3 , pyridine
CH_2Cl_2
OH
H_2SO_4 98%
Δ
OH
H_2SO_4 98%
Δ
OH
$Na_{(s)}$
OH
$SOCl_2$
pyridine
OH
Cl-Ts
pyridine
OH
HCl
OH

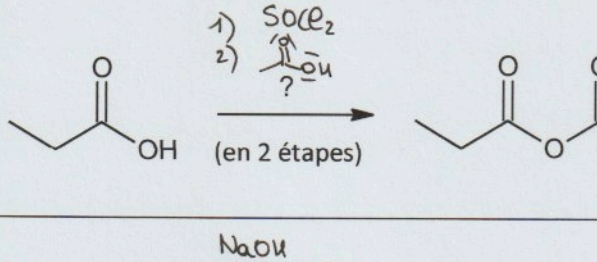

OH
− ōH
APTS, toluène
Déan - stark
?
(en 1 étape)
O
O

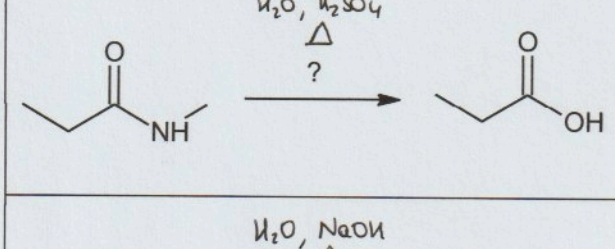

OH
1) SOCl2
2) − ōH
?
(en 2 étapes)
O

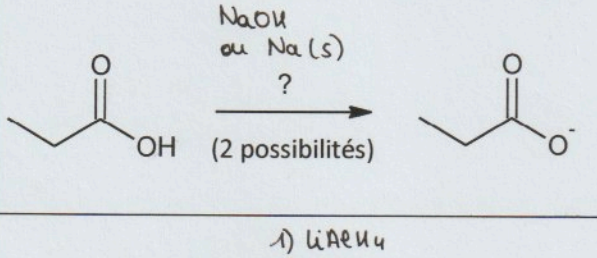

OH
SOCl2 ou
PCl3 ou PCl5
?
(3 possibilités)
Cl
O

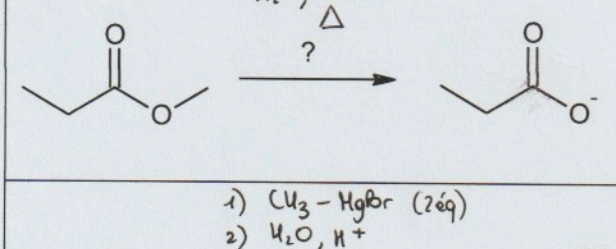

OH
1) SOCl2
2) − NH2 (2 éq)
?
(en 2 étapes)
NH
O

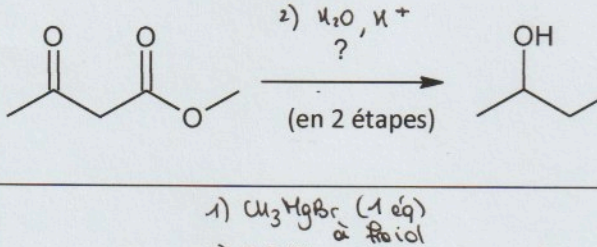

OH
Δ, P4O10
?
O

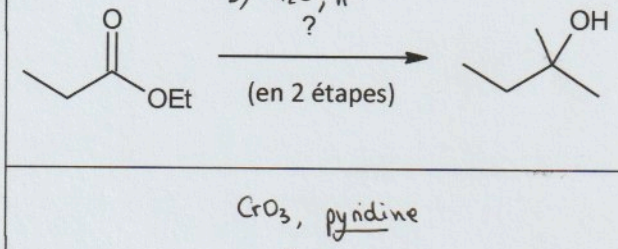

OH
1) SOCl2
2) ōH
?
(en 2 étapes)
O

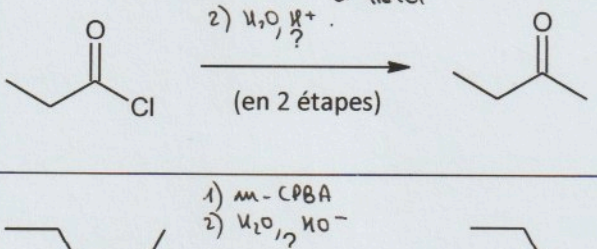

NH
H2O, H2SO4
Δ
?
OH
O

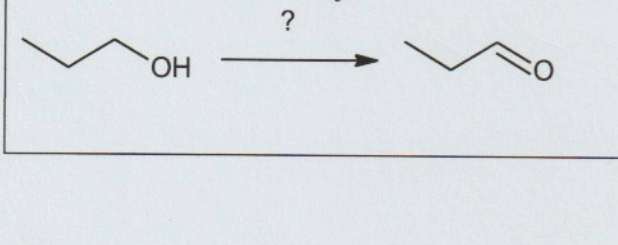

OH
NaOH
ou Na (s)
?
(2 possibilités)
O

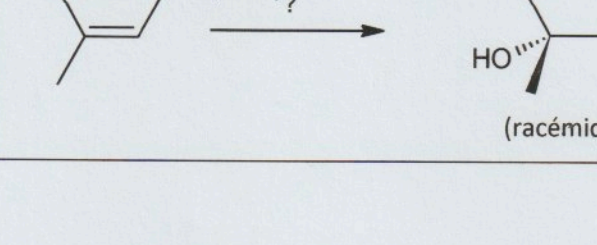

O
H2O, NaOH
Δ
?
O


O
O
1) LiAlH4
2) H2O, H+
?
(en 2 étapes)
OH
OH


OEt
1) CH3 − MgBr (2 éq)
2) H2O, H+
?
(en 2 étapes)
OH


Cl
1) CH3MgBr (1 éq)
à froid
2) H2O, H+
?
(en 2 étapes)
O


OH
CrO3, pyridine
?
O


1) m-CPBA
2) H2O, ? HO−
HO
OH
(racémique)