

CH-335 / Exercices - Séance N° 2

S. Dumondard

S. Gerber

2025



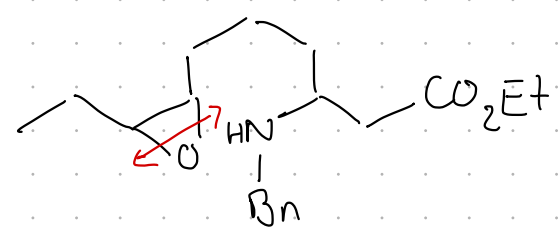
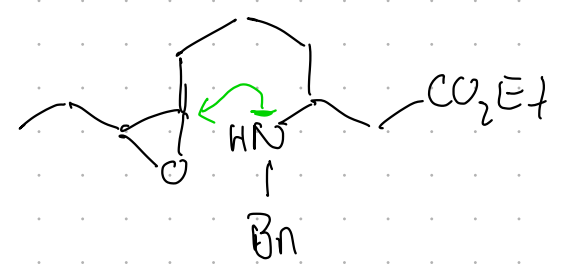
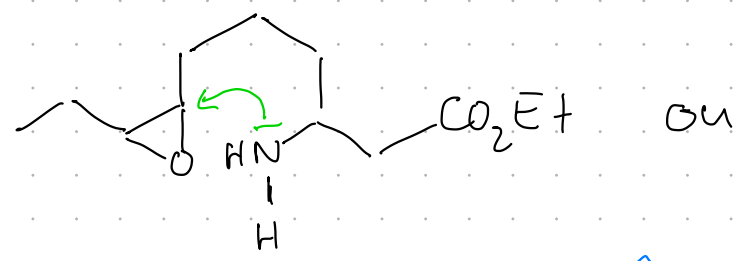
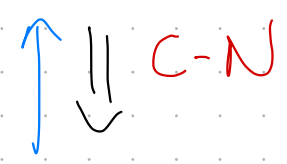
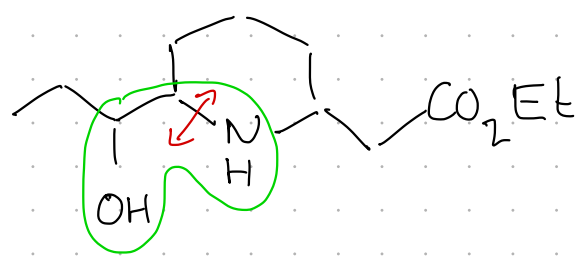
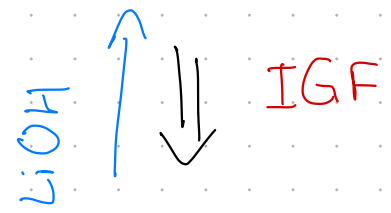
Exercice 1

1



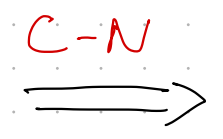
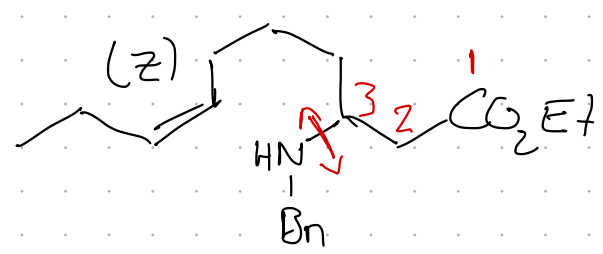
Éléments clés

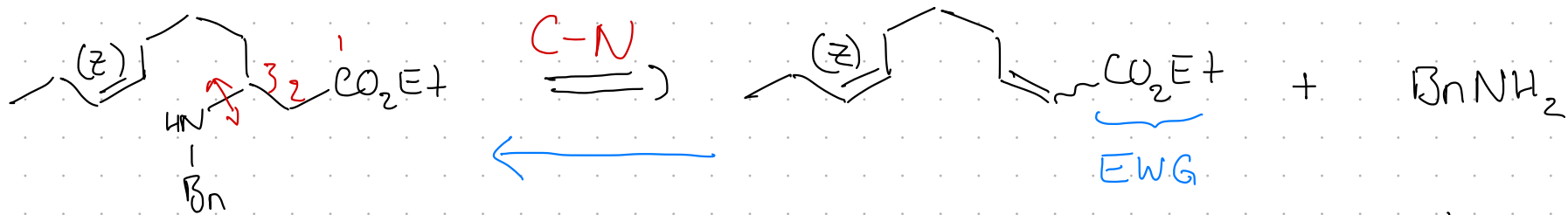
- 2-hydroxyl amine : disconnection C-X 1,2 \Rightarrow ouverture nucléophile d'un époxyde
- Acide carboxylique :
 - polaire + acide \Rightarrow à protéger (ester)
 - position 1,3 avec amine suggère l'addition de Michael



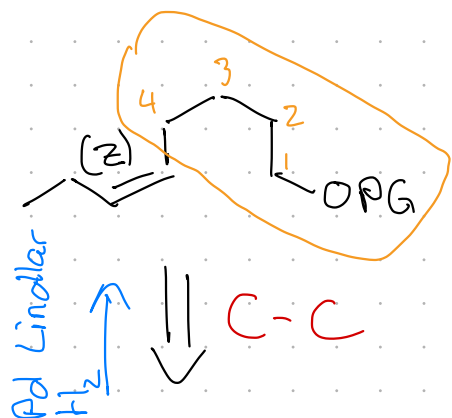
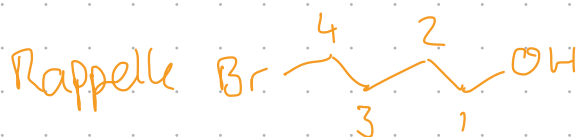
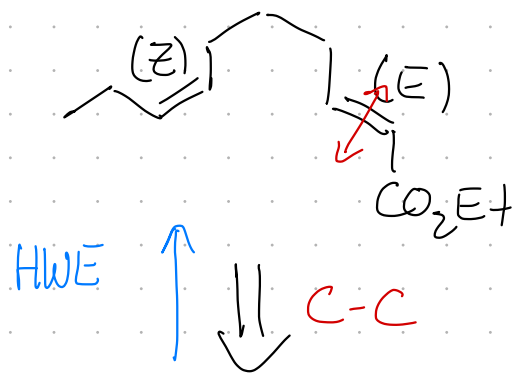
les mêmes structures

$2 \times \text{C-O}$
 \Rightarrow
 m CPBA

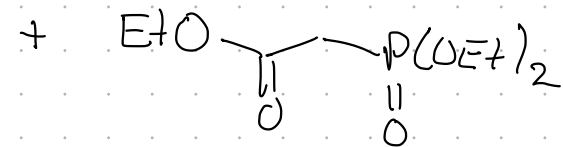
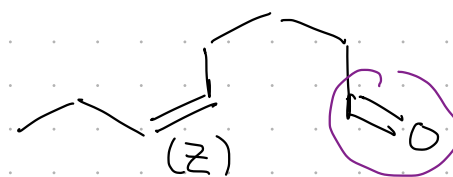




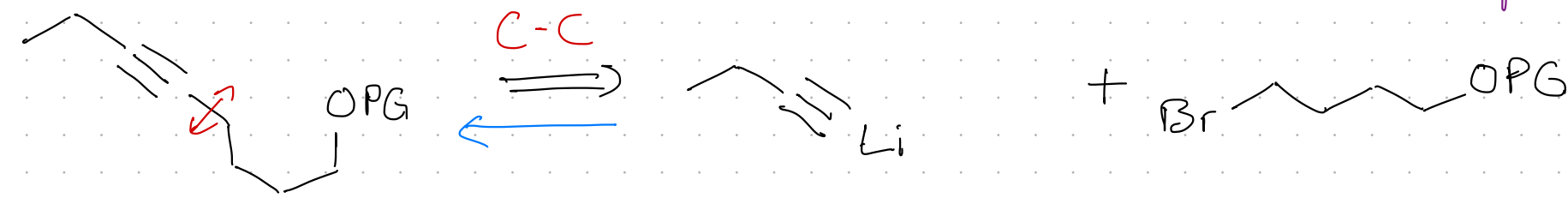
\rightarrow en β de l'insaturation
 \Rightarrow suggère l'oléfine HWE
 \rightarrow insaturation (E)

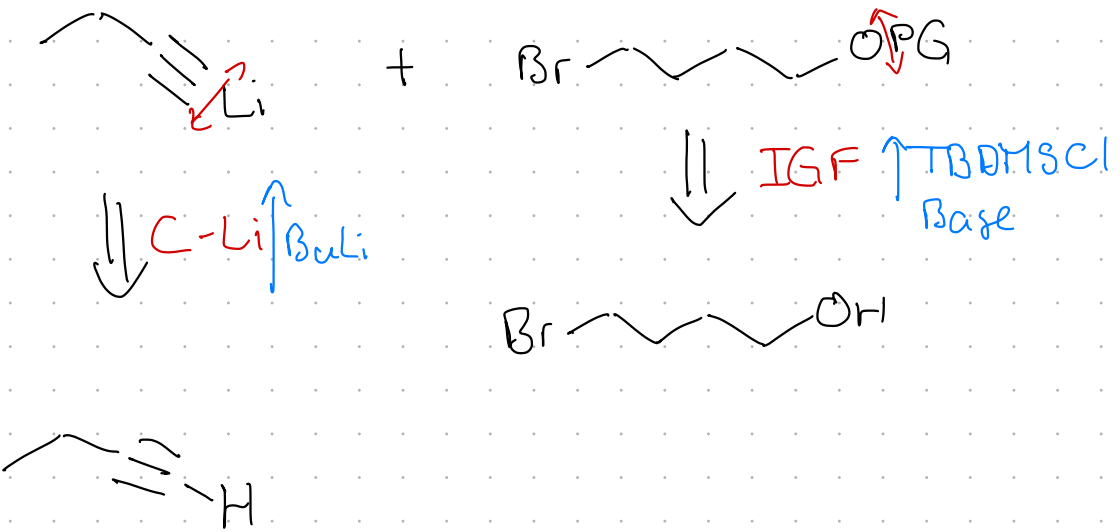


$2 \times IGF$
 $\xrightarrow{1. Bu_4NF}$
 $2. Swern\ ox.$



\rightarrow penser à un précurseur alcool, à protéger





PG : • résiste à des conditions basiques, nucléophiles, réductrices
 • déprotection en présence d'un alcène
 \Rightarrow éther silylé encombré

Exercice 3

- P_1 : présent durant toute la séquence
 \Rightarrow robuste : volumineux
- P_2 : • déprotégé sans affecter $P_1 \Rightarrow$ orthogonal
 • résiste aux conditions de Grignard
- P_3 : protection de deux OH en position 1,3