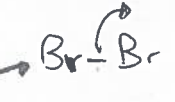
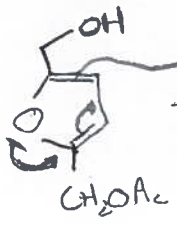
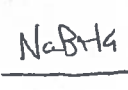
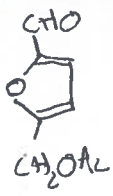
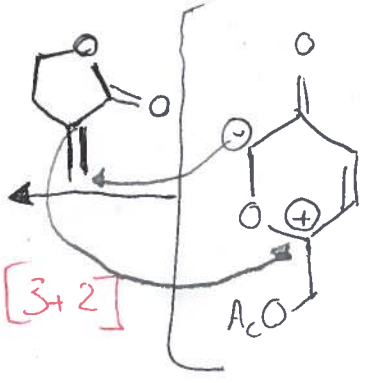
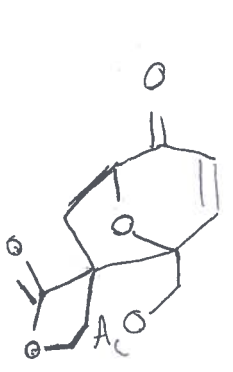
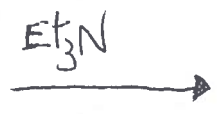
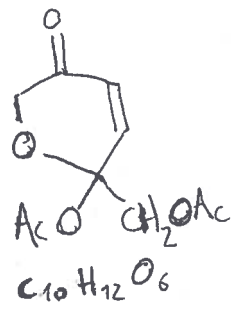
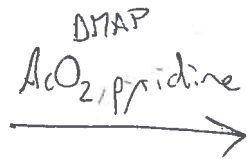
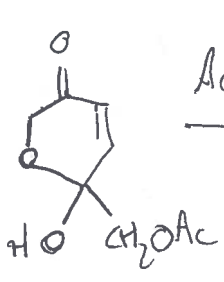
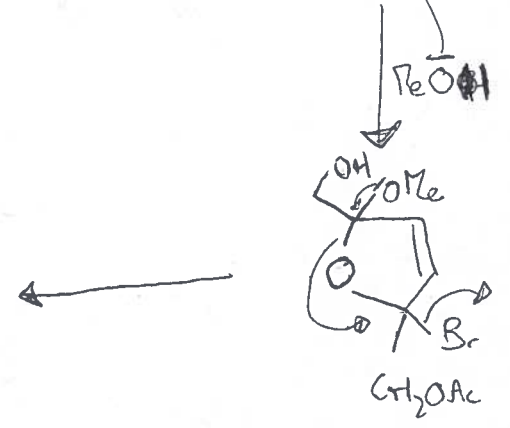
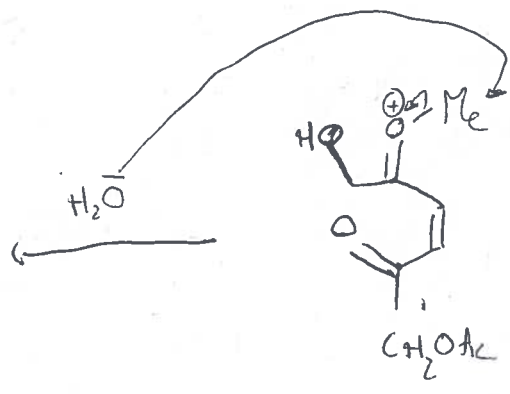
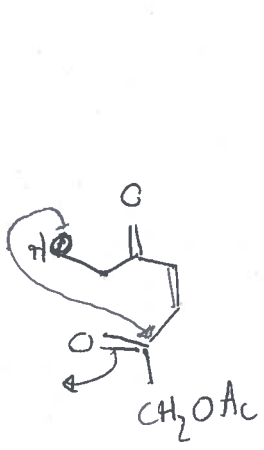
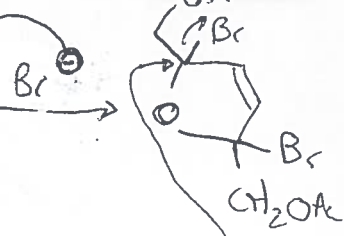
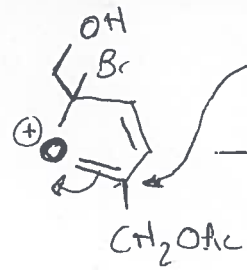


Exercise 1:



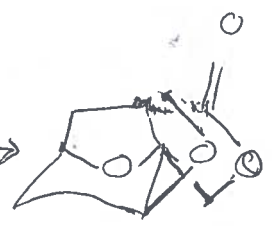
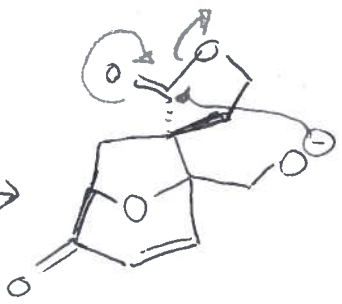
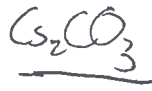
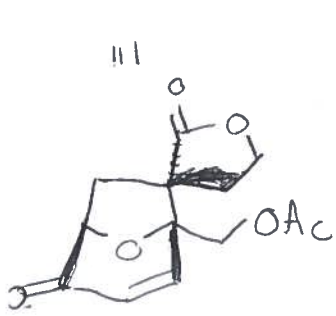
Achmatowicz  
reaction



[3+2]

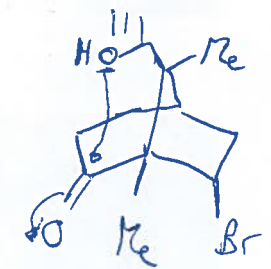
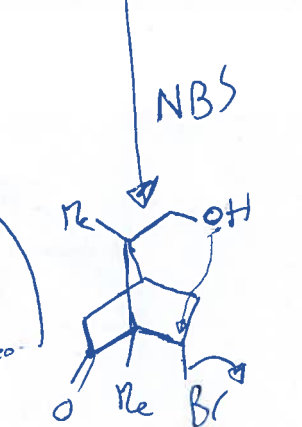
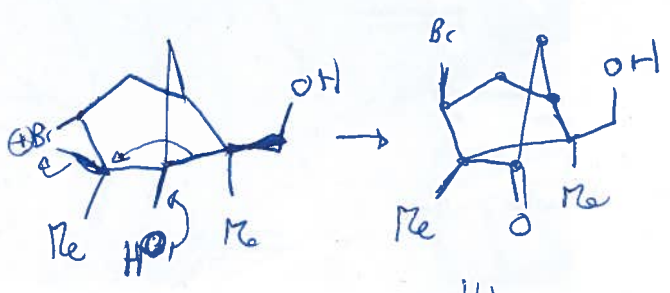
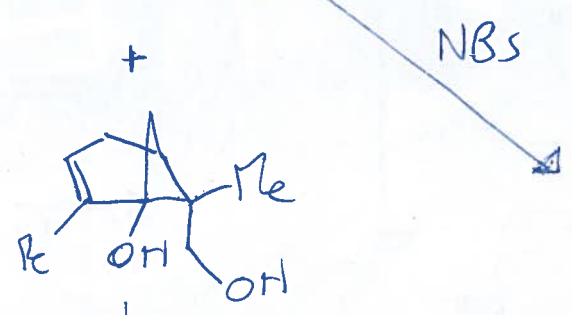
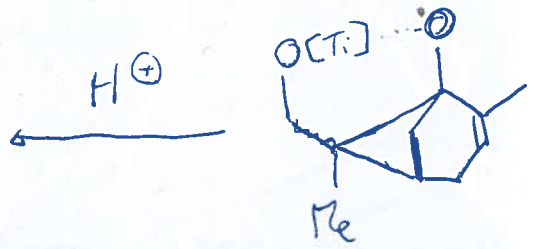
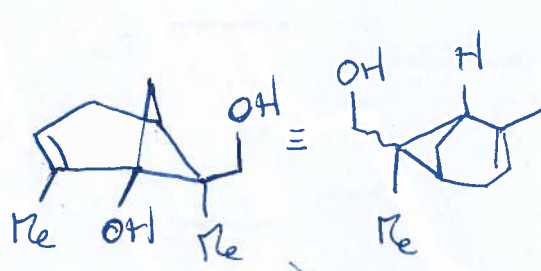
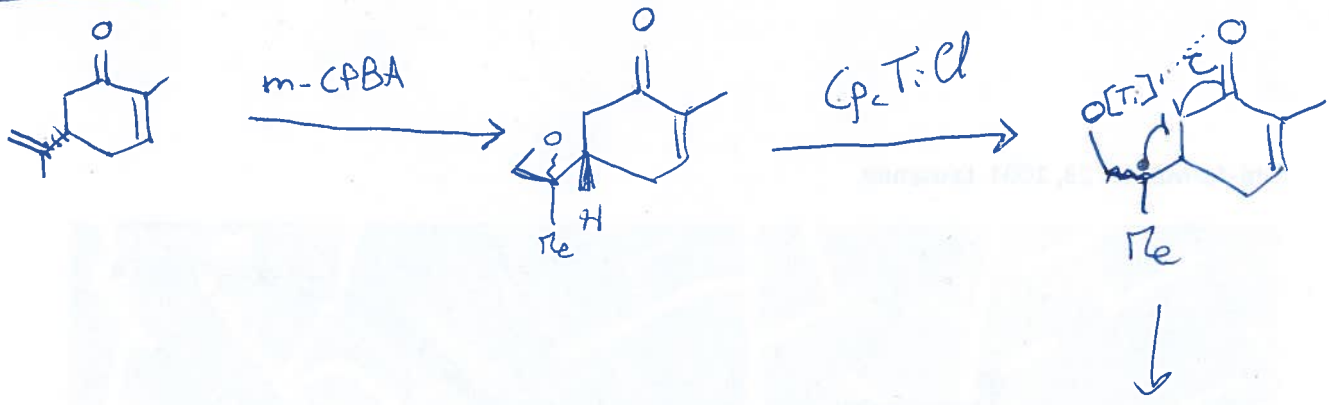


III

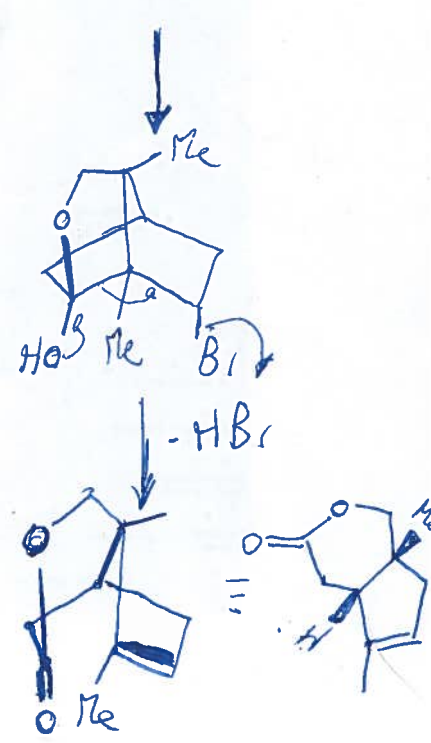




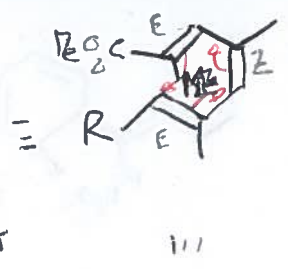
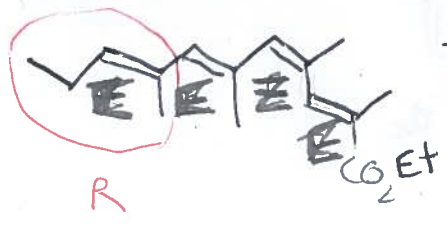
# Exercise 3



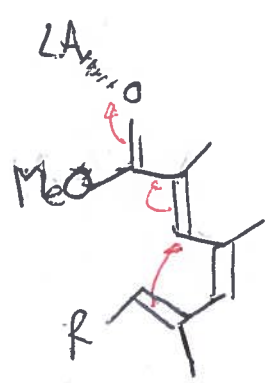
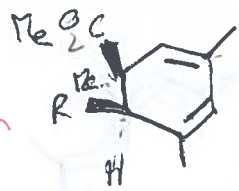
(formed the same way than the other diastereomers)



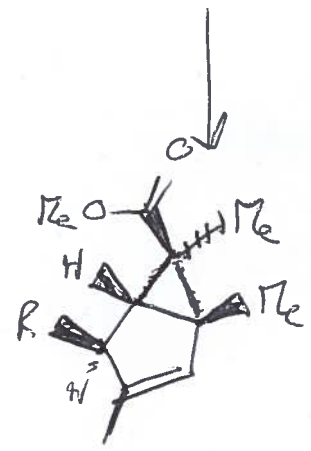
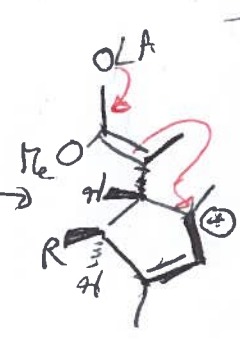
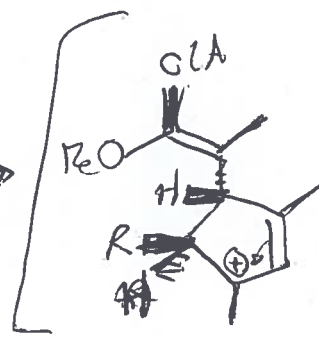
Exercise 4



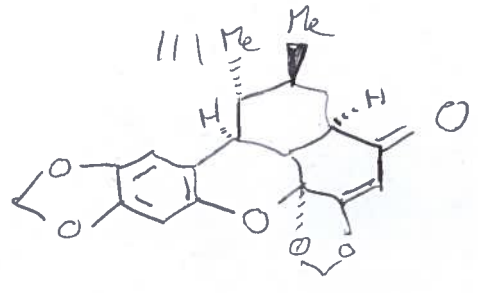
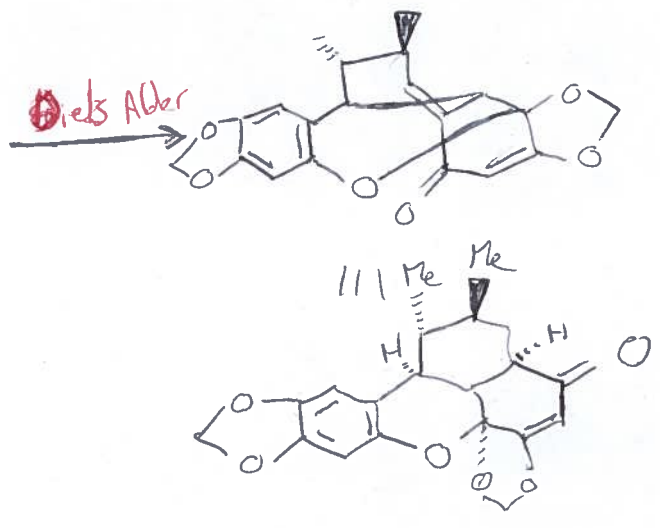
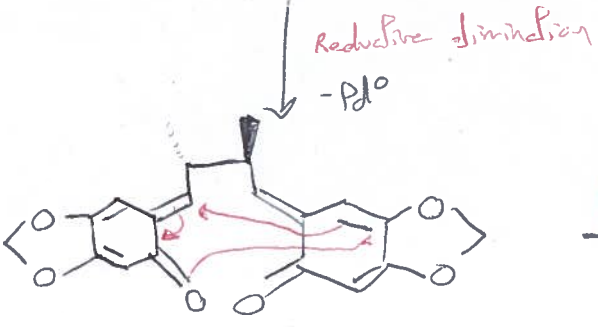
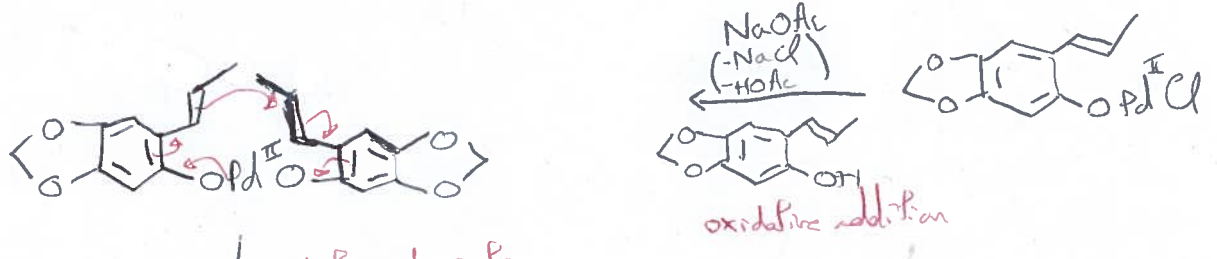
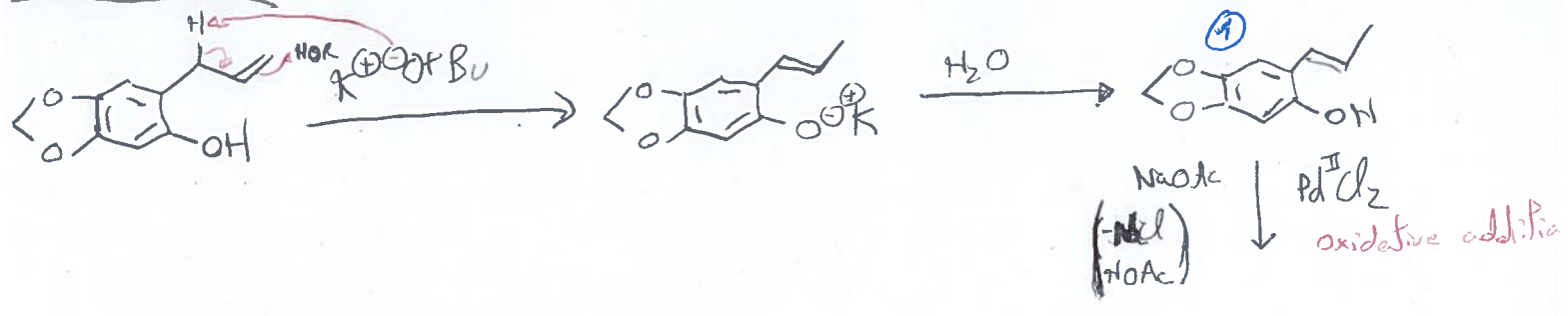
heat  
 6π electrocyclic ring closure  
 (disrotatory)



$\text{Me}_2\text{AlCl}$   
 $4\pi + 2\pi$   
 conrotatory



# Exercise 5



Caspalone