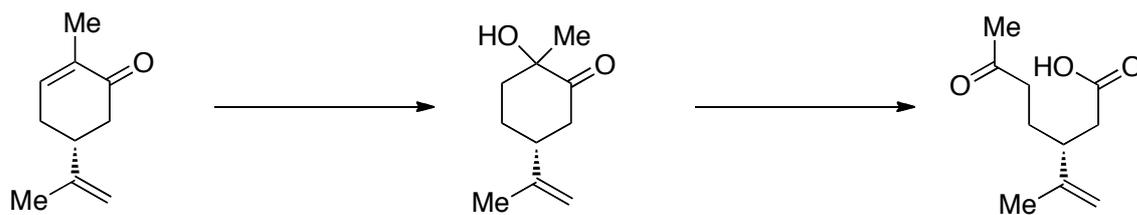


## Worksheet 28



TsCl (1.5 equiv.)  
4-PPY (1 equiv.)  
K<sub>2</sub>CO<sub>3</sub> (3 equiv.)

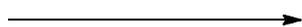
DIPEA (4 equiv.)  
DCM, 2h

4-PPY = 4-Pyrrolidino-  
pyridine  
DIPEA = Diisopropyl-  
ethylamine

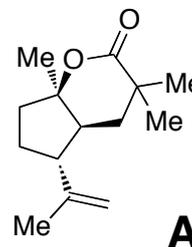
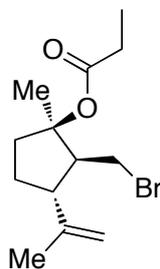
*intermediate*

*product*

1)



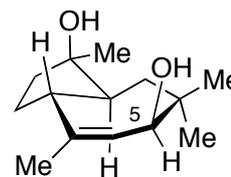
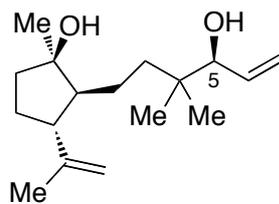
2)

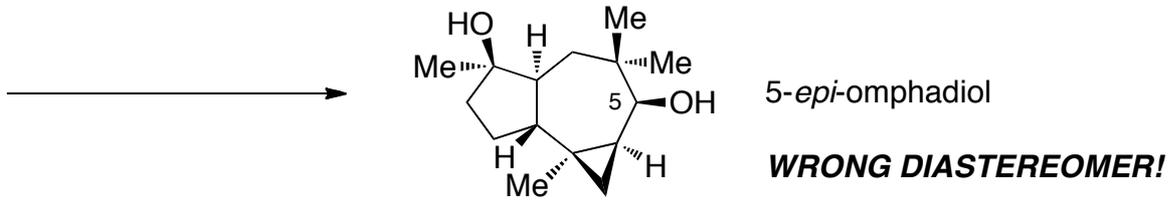


1)



2)





**do it again!**

