

ANDREANA RESEARCH GROUP

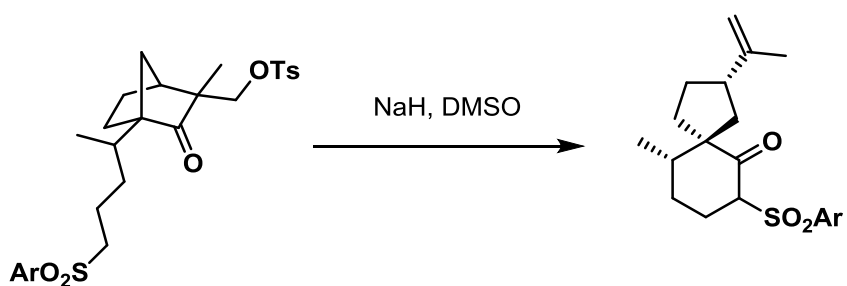
Problem Set – 08/10/2018

Credit: Prof David Evans group website

(Questions 1 and 4 go together similarly 2 and 3 go together)

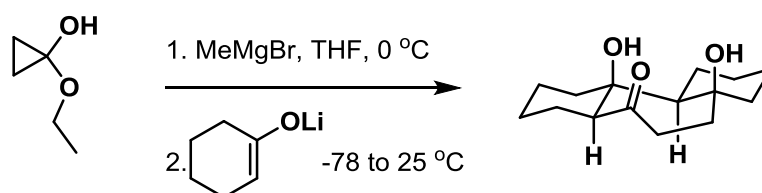
1) Provide the mechanism for the following:

Ref: *J. Org. Chem.* 1978, **43**, 1750



2) Provide the mechanism for the following:

Ref: *J. Am. Chem. Soc.* 1986, **108**, 8313



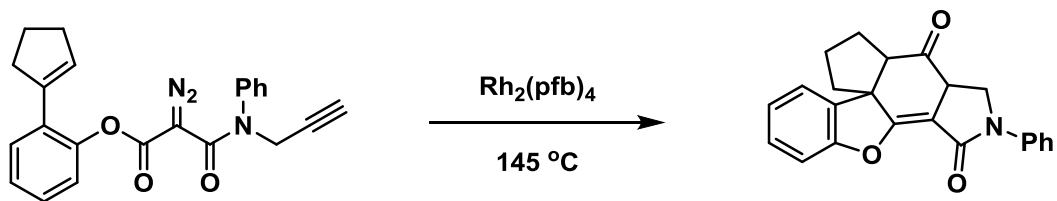
3) Provide the mechanism for the following:

Ref: *J. Am. Chem. Soc.* 1999, **121**, 9895

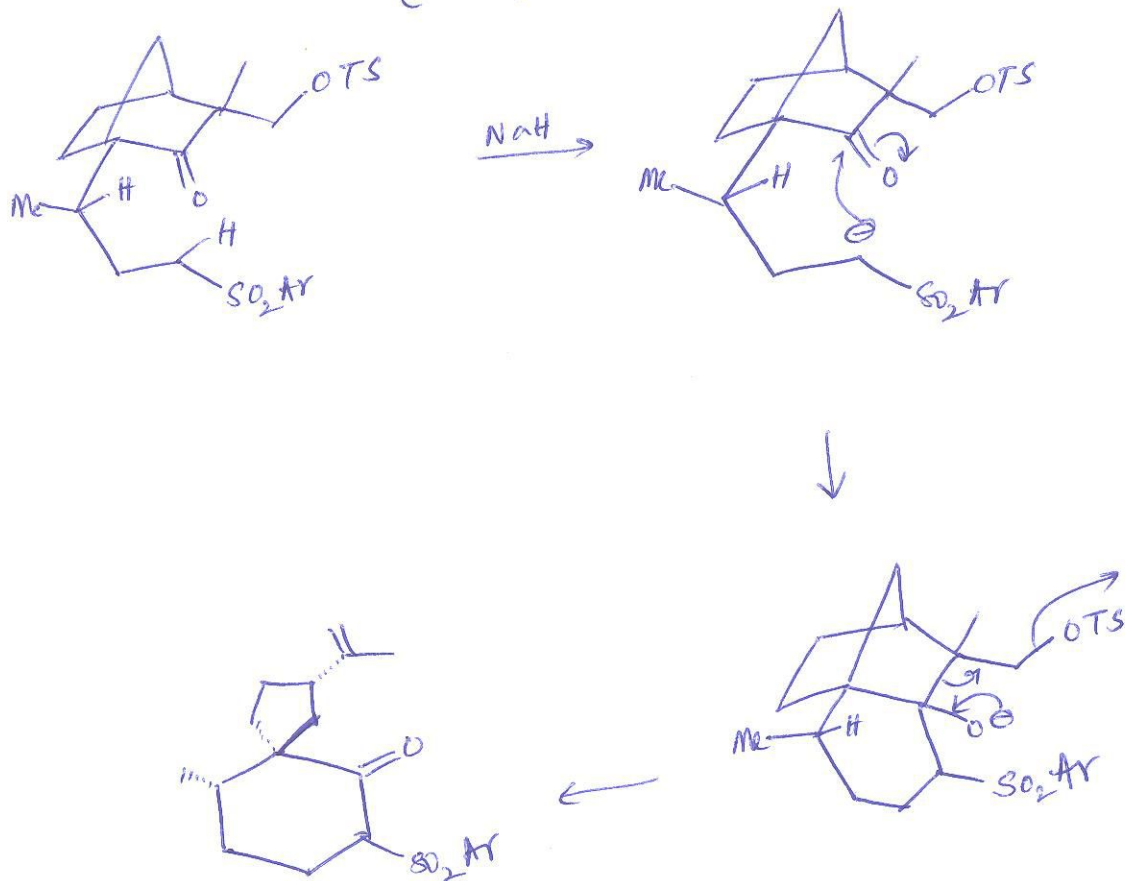


4) Provide the mechanism for the following:

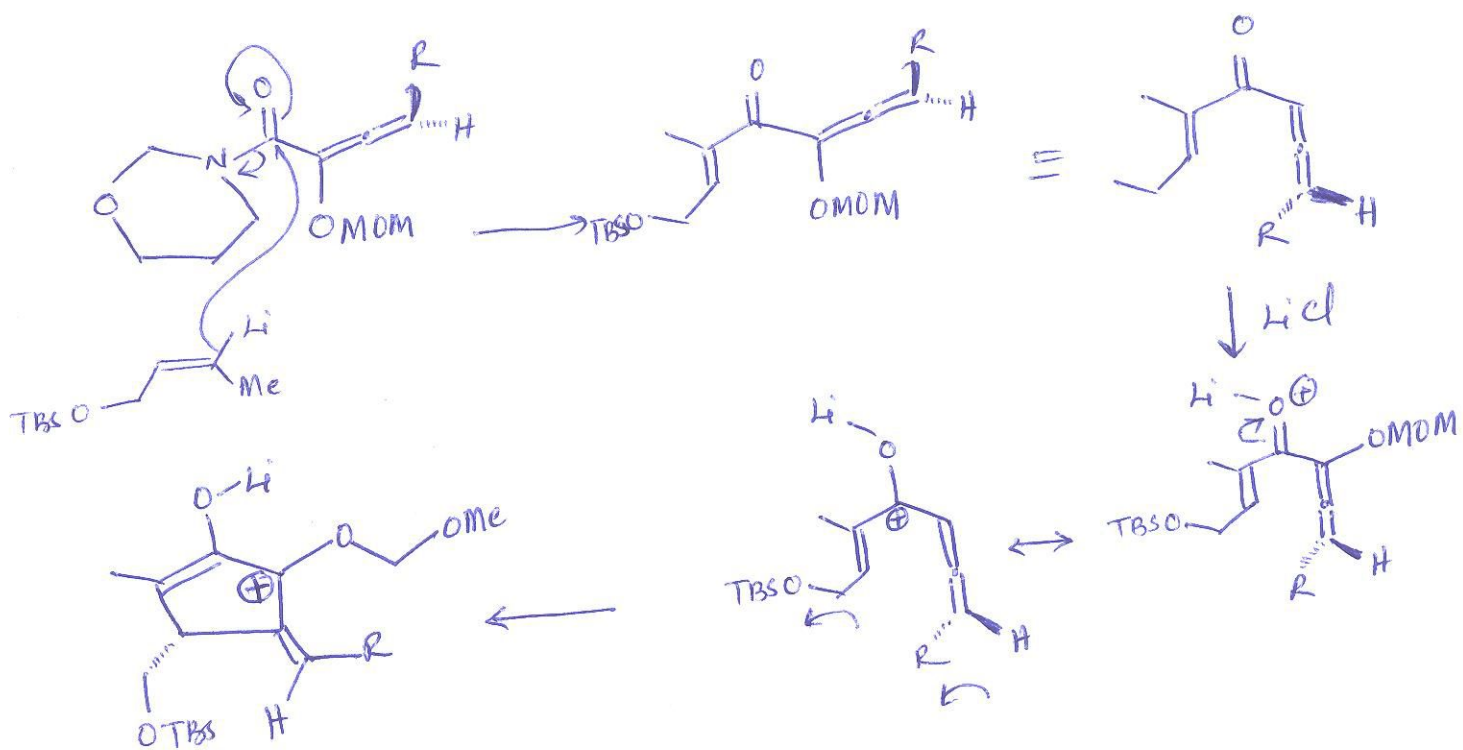
Ref: *Organic Lett.* 2001, **ASAP**



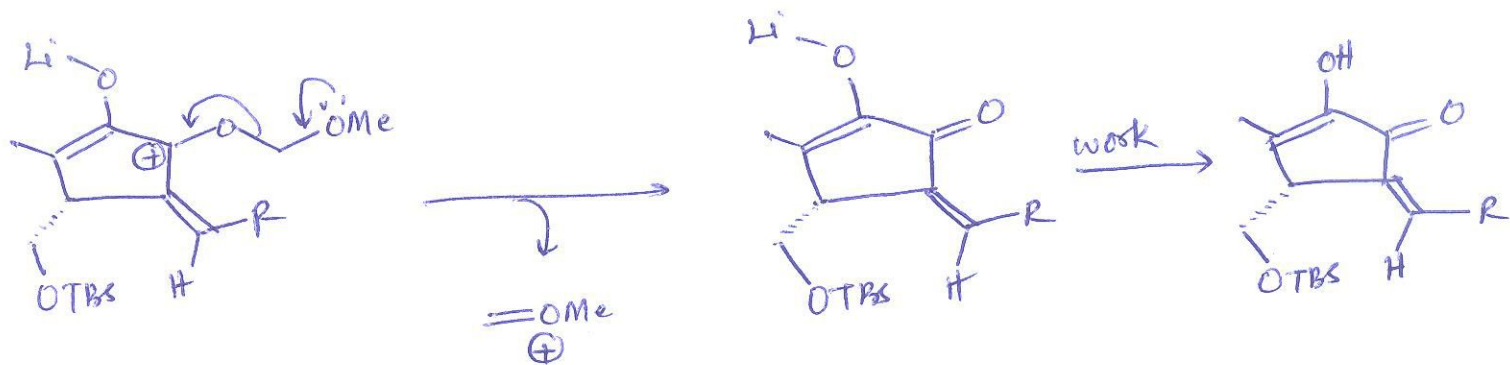
①



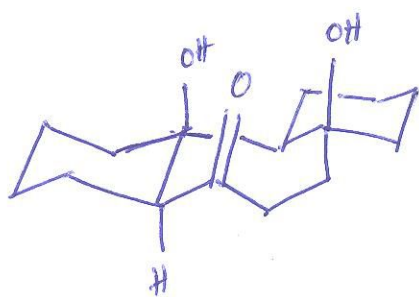
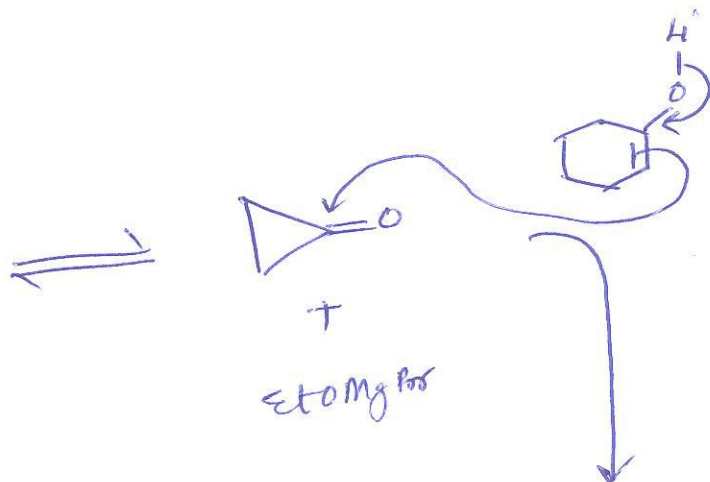
③



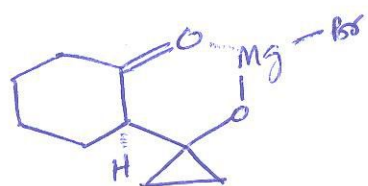
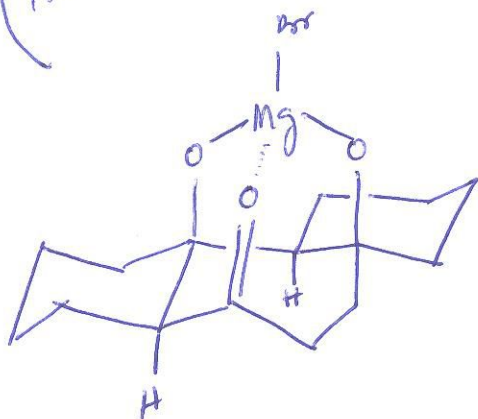
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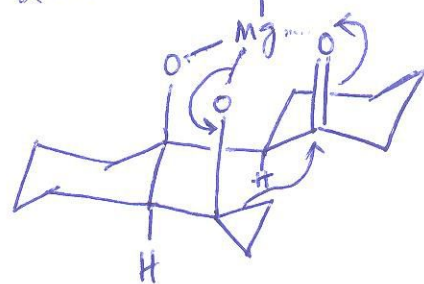
2



Isobornyl workup



Aldol addition
anti to
 α -substituent



④

