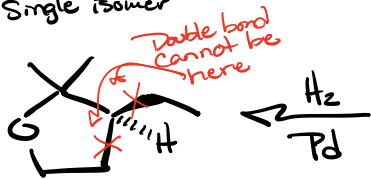
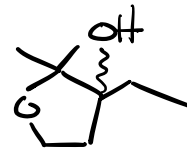
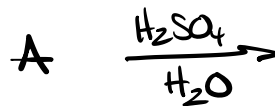


Single isomer



Hydrogenation
 Syn add
 no C⁺
 no shifts

Racemic



(±)

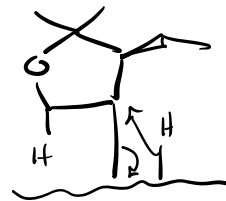
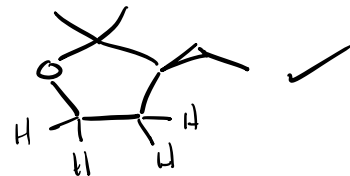
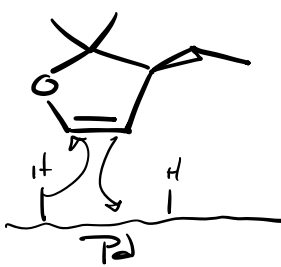
Hydration
 C⁺
 Shifts possible
 Racemic in add
 to C⁺

An alkene

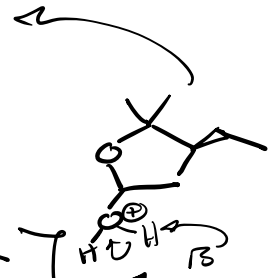
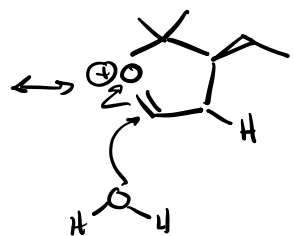
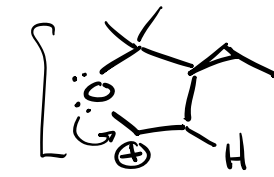
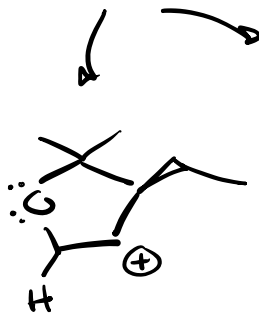
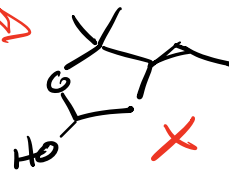
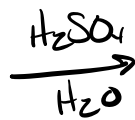
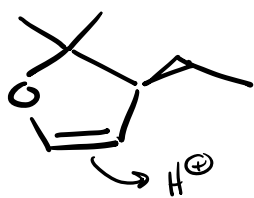


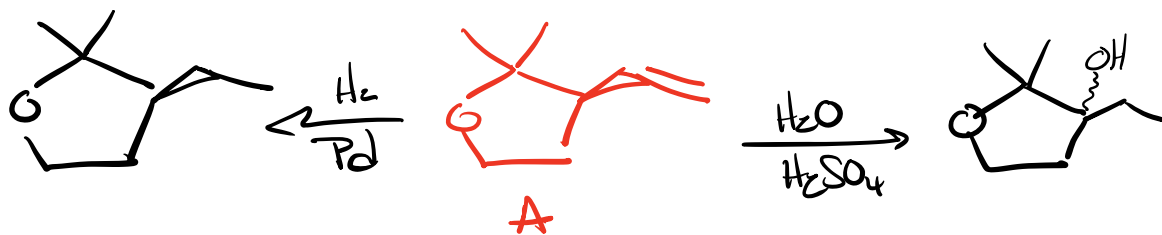
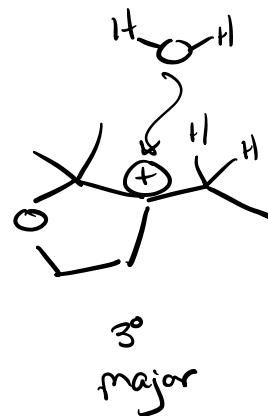
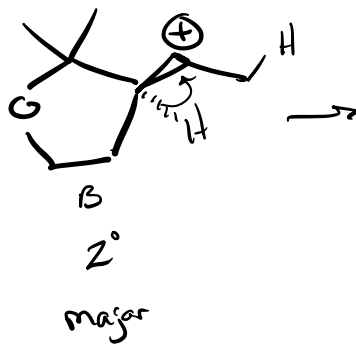
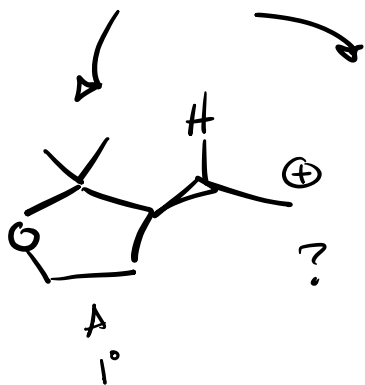
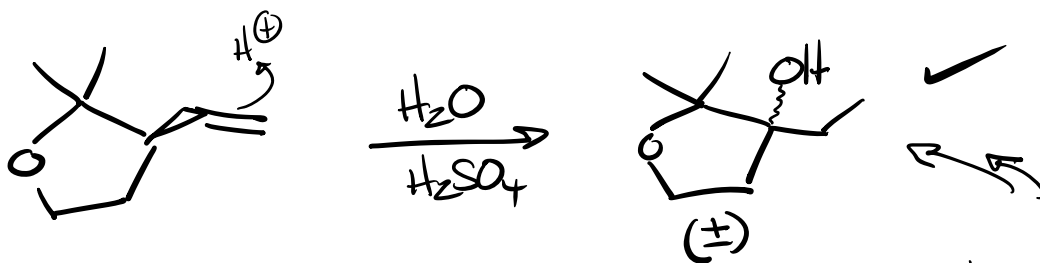
Alkene in the molecule

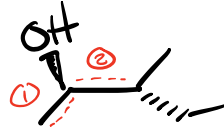
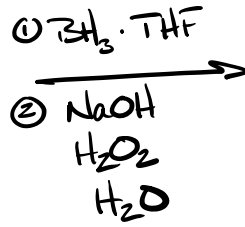
4 places to consider



Does not work





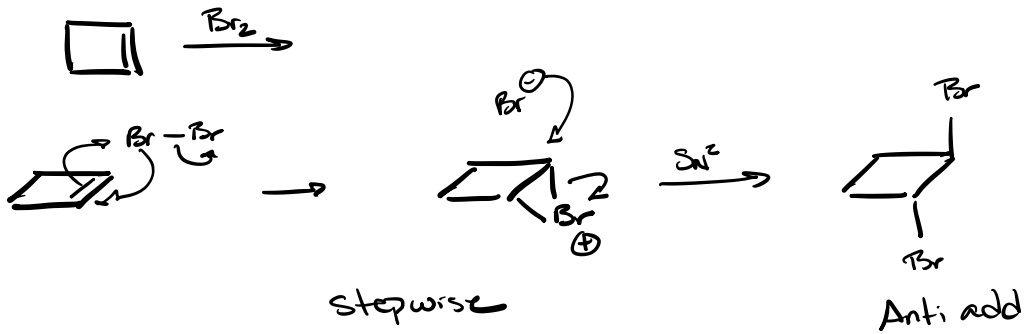


Syn add!

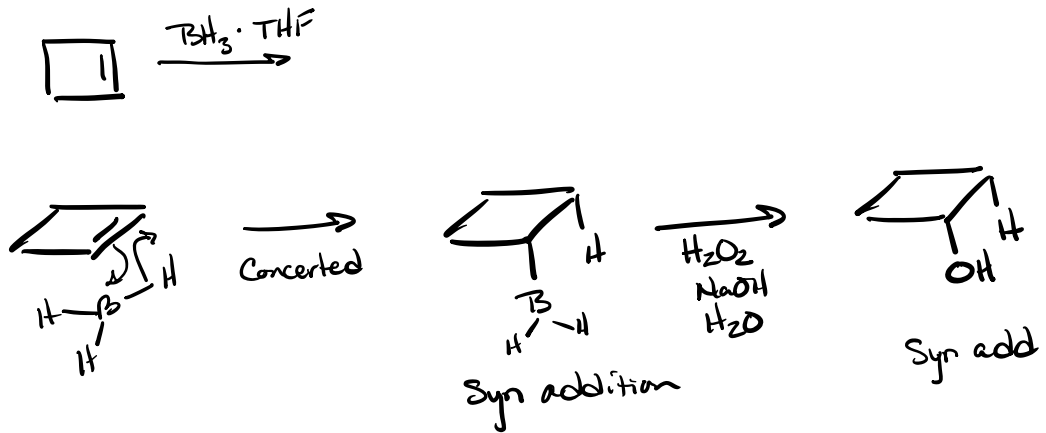
No shifts

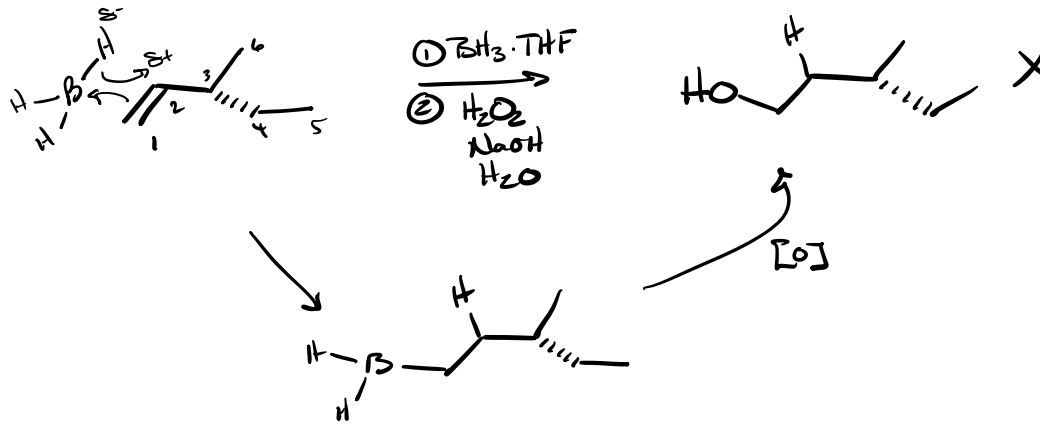
No C^+

Anti Add

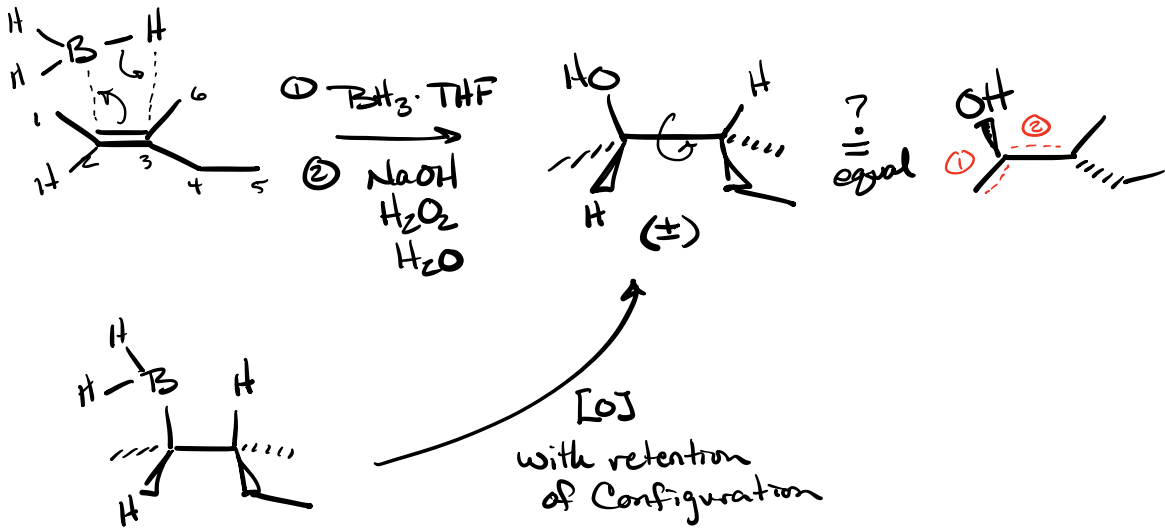


Syn Add

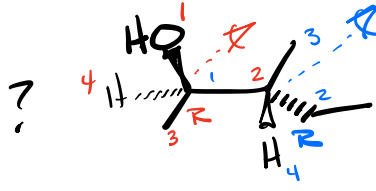
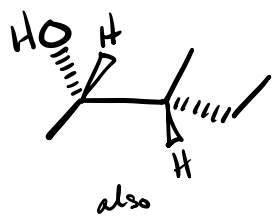
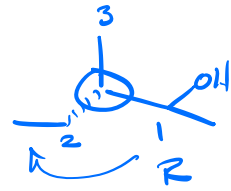
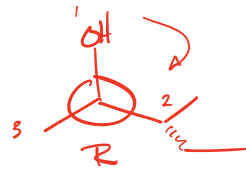
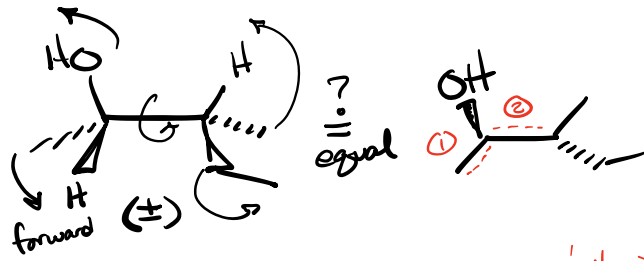




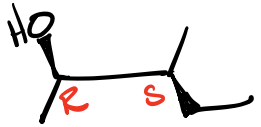
Rotation about σ bond!



By Rotation

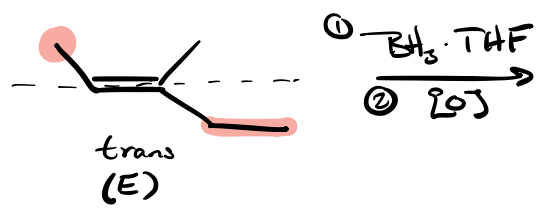


not the same

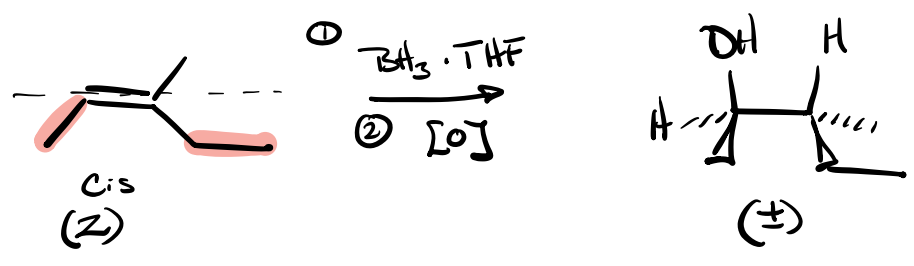


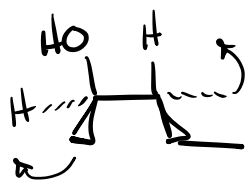
(R, S)

(R, R) X

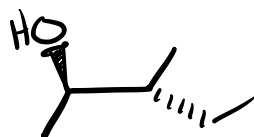
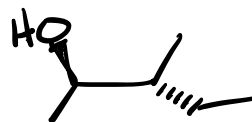


gives wrong stereo





Same?



✓

