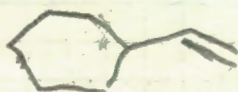
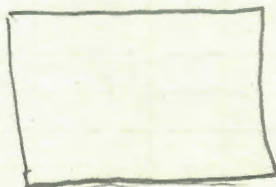
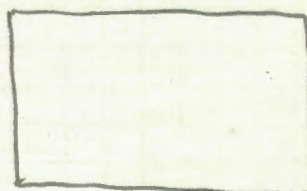
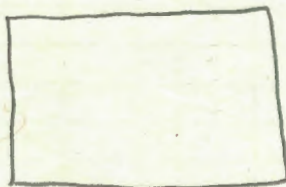


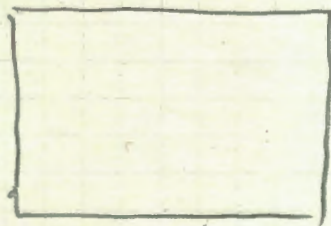
HCl →



HCl →



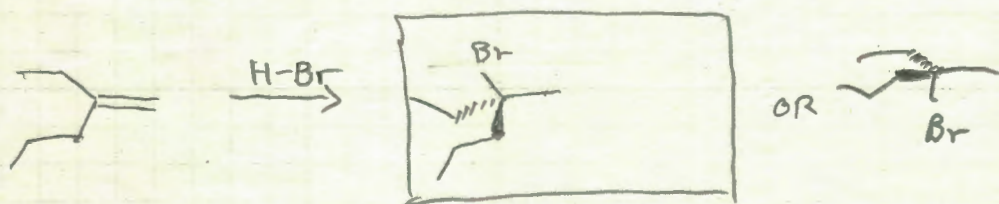
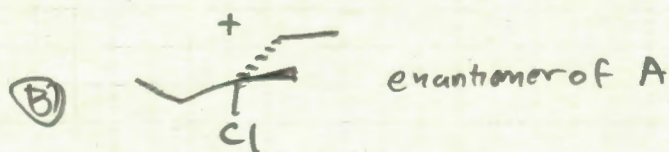
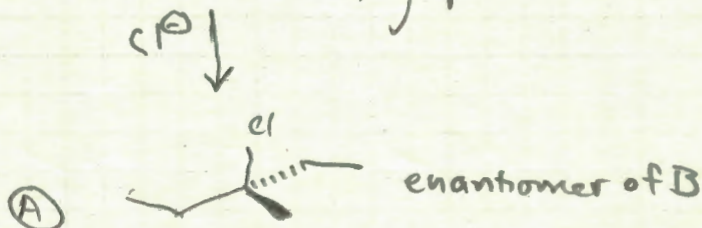
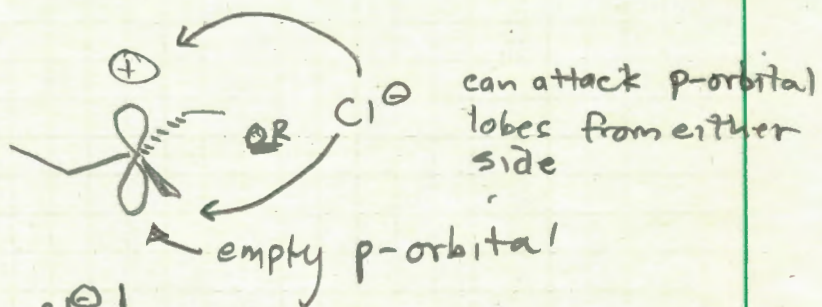
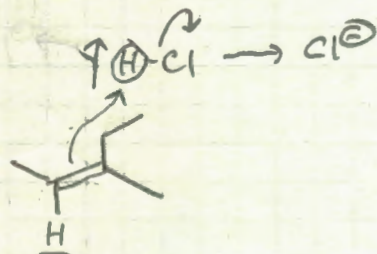
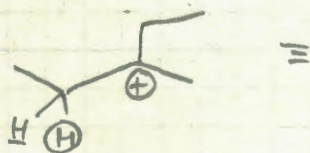
↓
H-Cl
peroxides
+ light



Draw an X in
box if no more than
1 product can be
made according to
Markovnikov addⁿ

Can a rearrangement
happen via this mechanism

C^+ hybridization



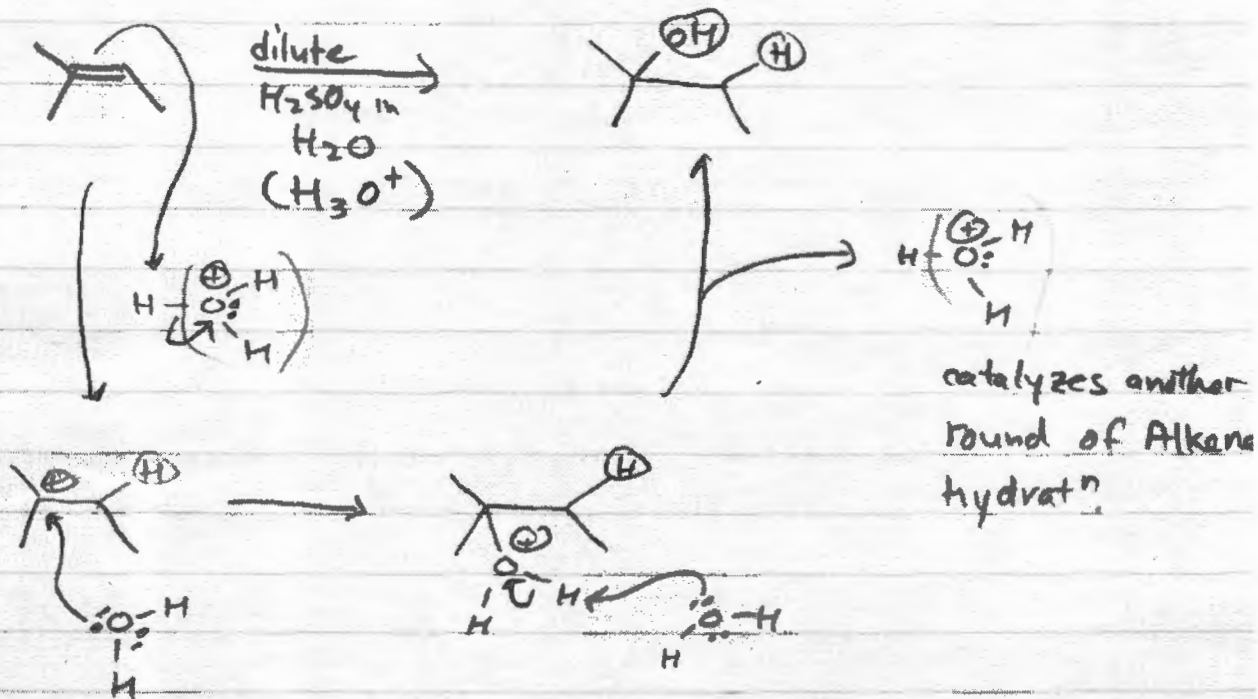
show one stereoisomer if a chiral center is made.

②

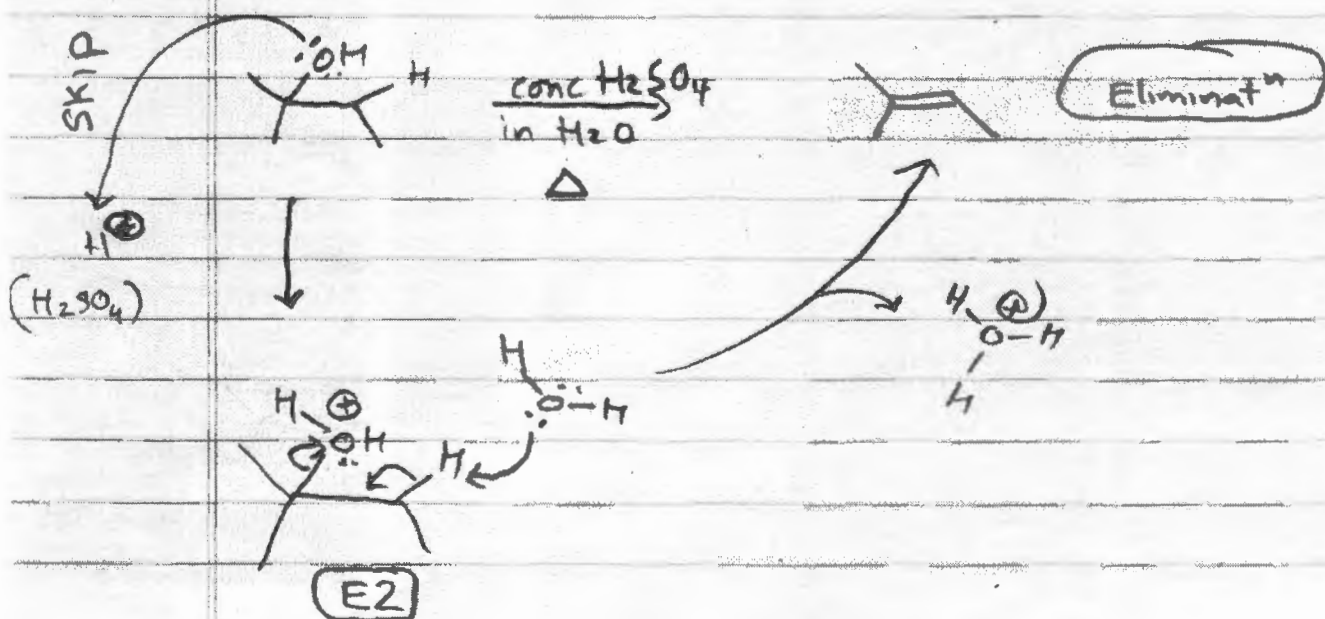
Ch 8-9

Hydration Addⁿ Rxn (Hydration = HOH)
(Acid Catalyzed) - (DILUTE H_2SO_4 in H_2O)

Recall
 $H-Br$



Recall: Concentrated H_2SO_4 in H_2O + Δ

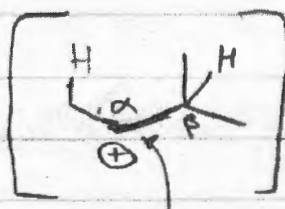
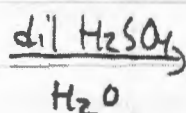
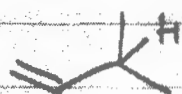


⑦

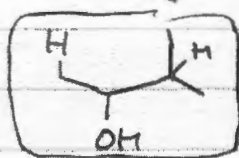
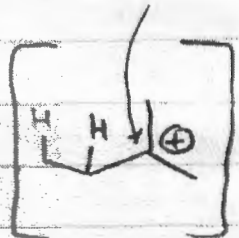
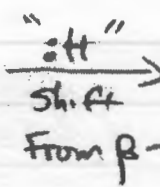
~~Ch 8-8~~

"Hydration" reaction w/o $\oplus$ intermediate.

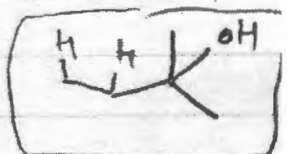
NOTES via $\oplus$ intermediate.



2° C $\oplus$



Prod w/o



Prod after
rearr

2 products are made

A rearr

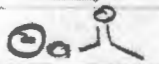
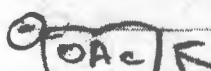
B

Sect 8.6

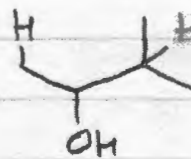
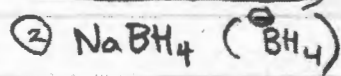
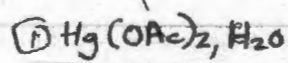
Oxymercuration - Demercuration

Hg^{2+} is Lewis Acid

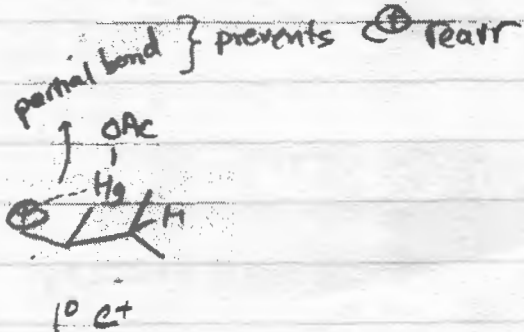
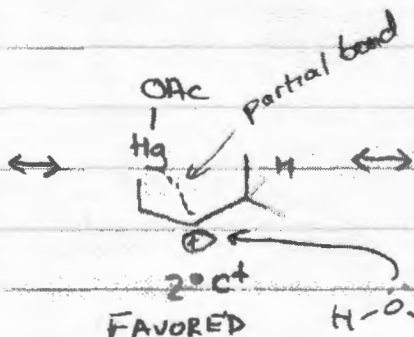
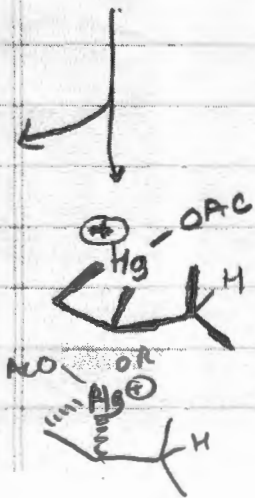
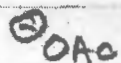
We only want product A, how can we make it?



Acetate!



NO rearr.



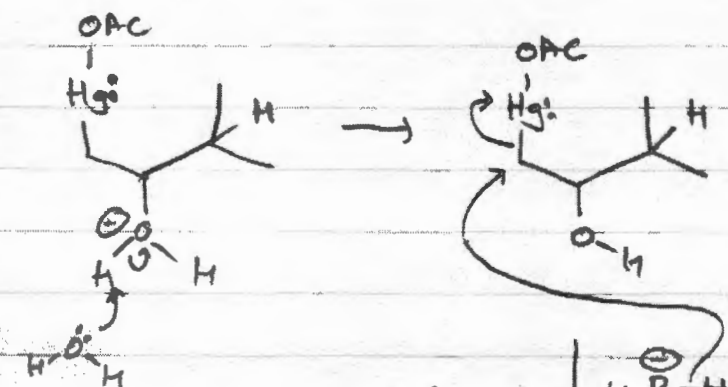
partial bond } prevents $\oplus$ rearr



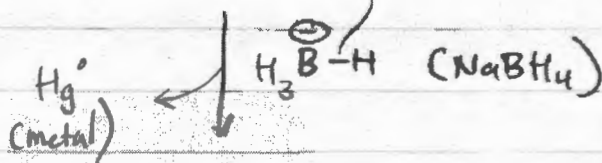
⑧
Ch 8-9

cont d

NOTE: Lewis Acid (Hg^{2+} in this case) adds to C of $\text{C}=\text{C}$ that gives more stable δ^+



End of Rxn 1



ONLY No rearr

$\begin{array}{c} \text{H} \\ | \\ \text{H}-\text{B}^{\ominus}-\text{H} \\ | \\ \text{H} \end{array}$
 B likes to be trivalent and neutral, so will give up $\text{H}^{\ominus}$

Practice



① $\text{Hg}(\text{OAc})_2$, EtOH
② NaBH_4

