

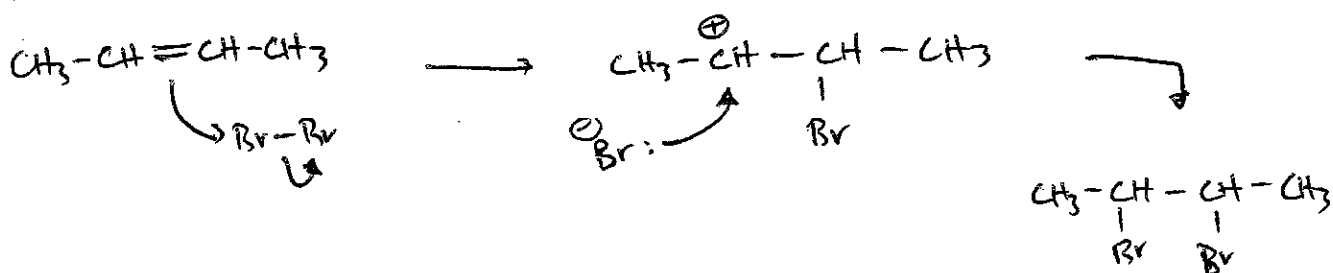
Course 343 Lecturer Hockenberger-Gellman
Day Fri Date 10/4
Notes Taken By Adams Total # of Pages 5

Submit a *Single-sided Copy* to the Undergraduate Office
NO NOT STAPLE - ONLY WRITE NOTES INSIDE THE SQUARE BELOW

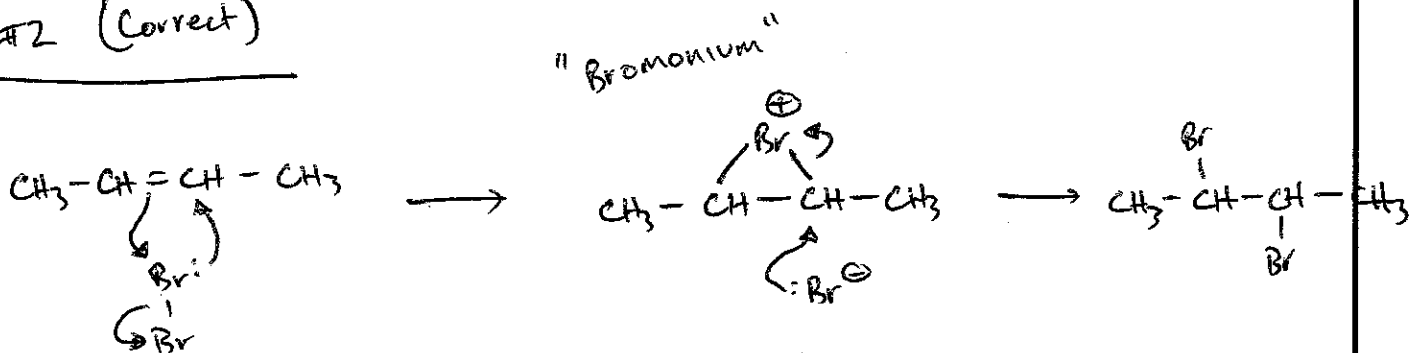
Recall: Br₂ addition to alkenes... consider 2 alternative mechanisms



Mech #1 (Incorrect)

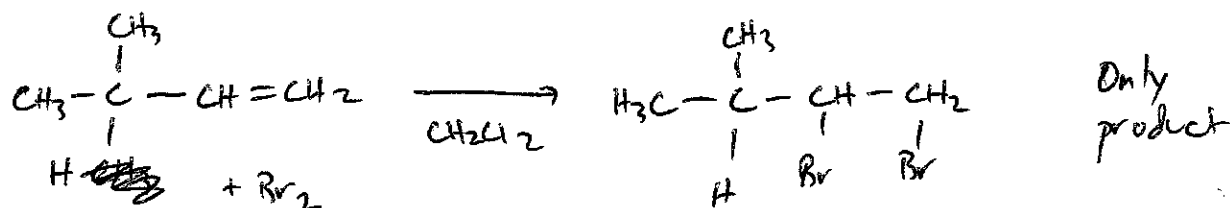


Mech #2 (Correct)

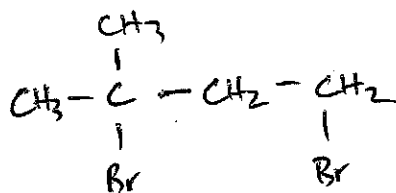


Submit a *Single-sided Copy* to the Undergraduate Office
NO NOT STAPLE - ONLY WRITE NOTES INSIDE THE SQUARE BELOW

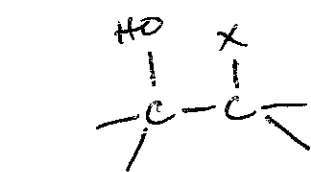
• How do we disprove Hyp #1?



if a carbocation were an intermediate in this rxn,
 there would be a hydride shift to give:

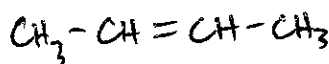


Halohydrin formation

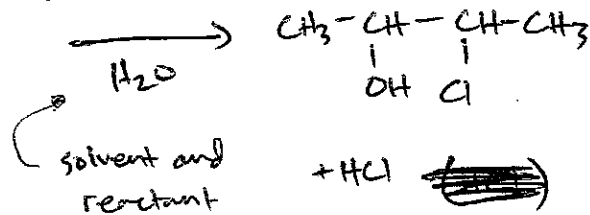


"halohydrin"

X = Br, Cl



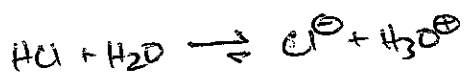
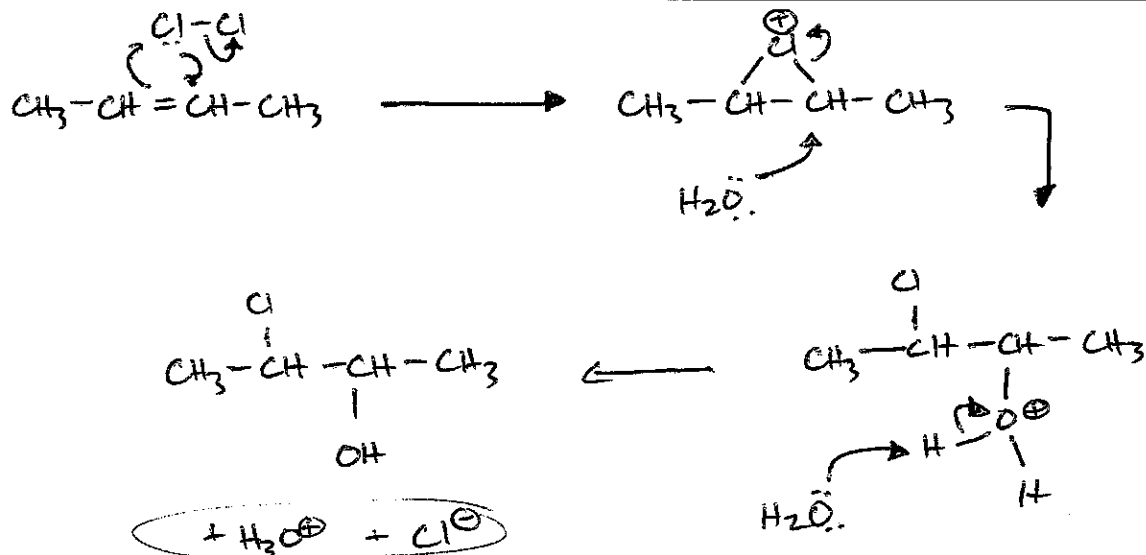
+ Cl₂



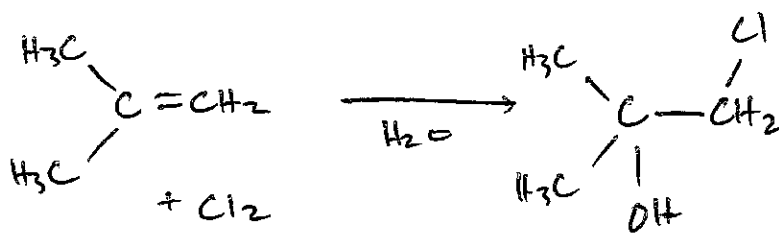
solvent and reactant

Submit a *Single-sided Copy* to the Undergraduate Office
NO NOT STAPLE - ONLY WRITE NOTES INSIDE THE SQUARE BELOW

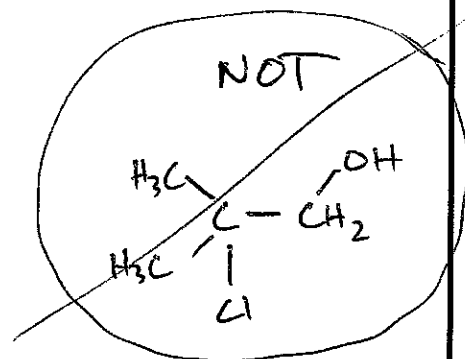
Mech:



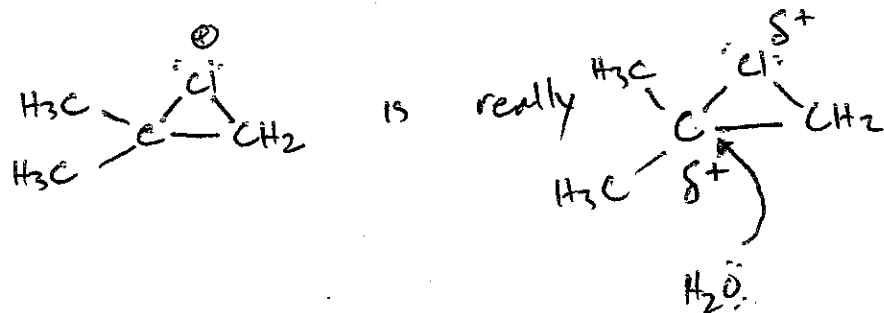
• Regioselectivity for unsymmetrical alkenes?



Why? C^{\oplus} vs $\text{C}^{\delta+}$

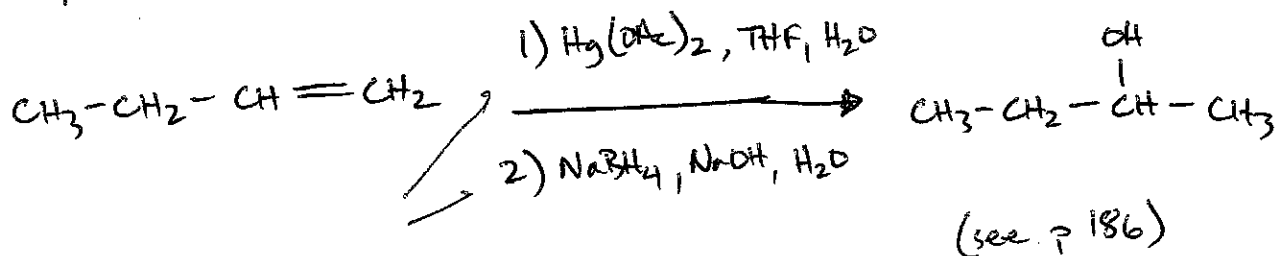


Submit a *Single-sided Copy* to the Undergraduate Office
NO NOT STAPLE - ONLY WRITE NOTES INSIDE THE SQUARE BELOW

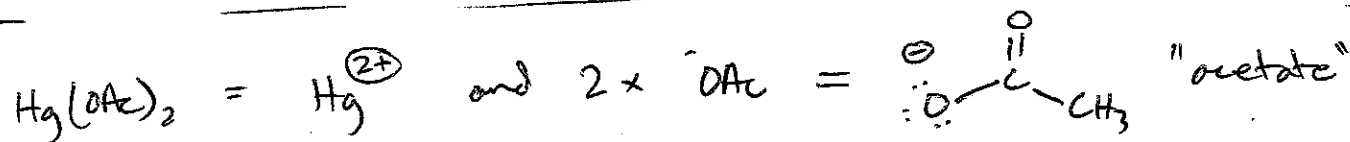


Oxymercuration - reduction

- Two-step process to convert alkenes to "Markovnikov" alcohols without rearrangement.
- Overall process (specific example):



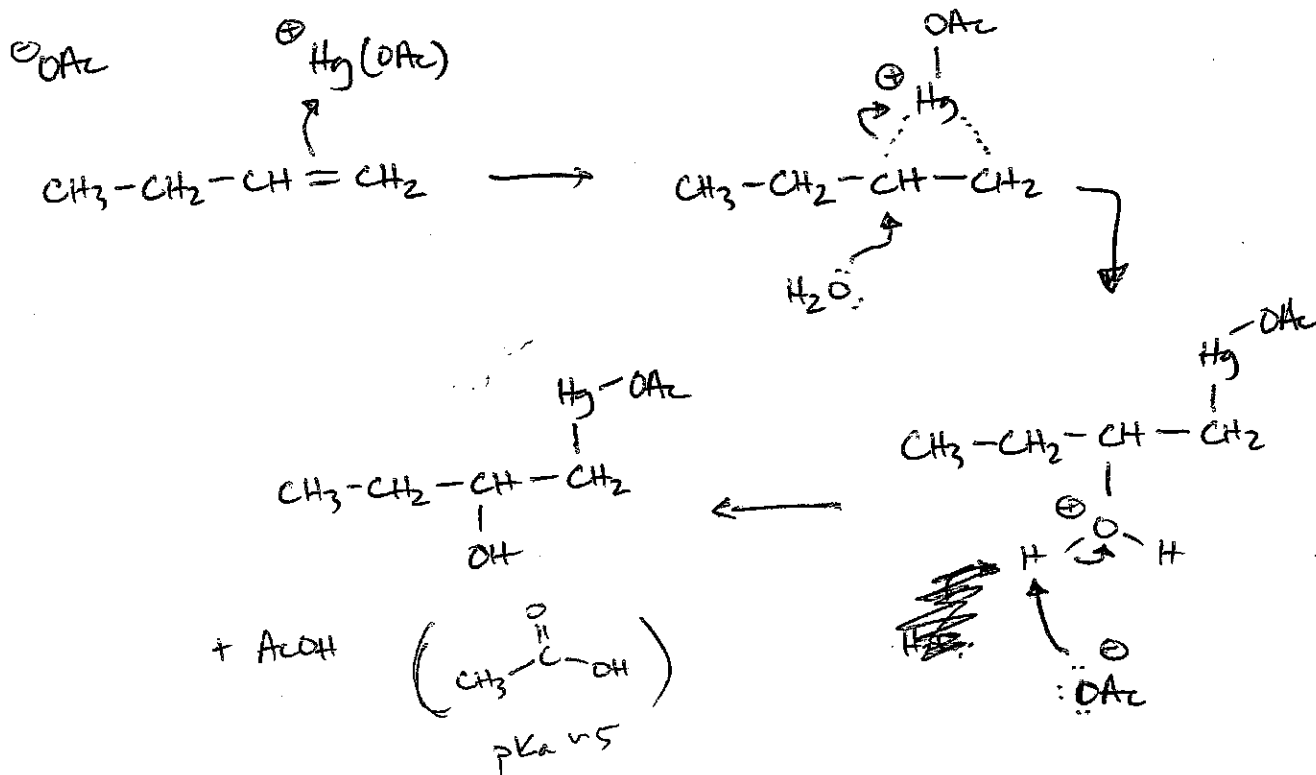
the numbering of steps
is important!



Tetrahydrofuran

Submit a *Single-sided Copy* to the Undergraduate Office
NO NOT STAPLE - ONLY WRITE NOTES INSIDE THE SQUARE BELOW

• Mech for first step ("oxymercuration")



Note:

- 1) The "organo-mercury" product is not isolated, it's reacted further in the next step ($\text{NaBH}_4, \text{NaOH}$)
- 2) "Organometallic"

• This mechanism differs slightly from text (p 188)

