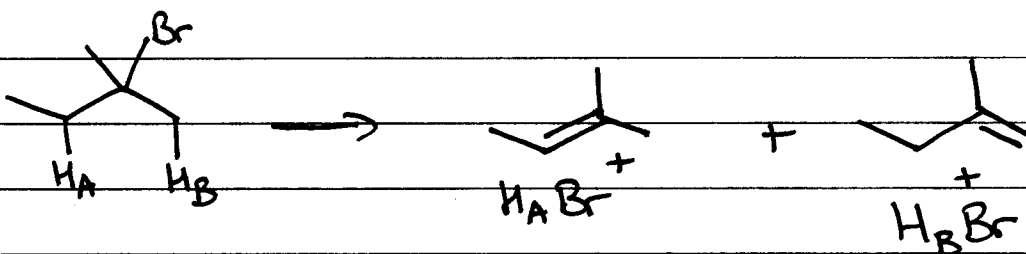
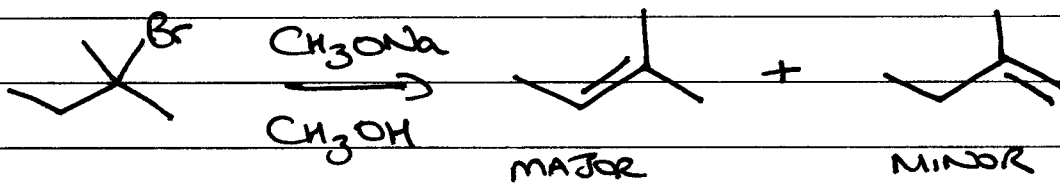


- ① INTRO TO β -ELIMINATION
- ② MECHANISMS
- ③ STEREOCHEMISTRY
- ④ SUMMARY

READ 9.5-9.11, PROBLEMS 9.37-9.42

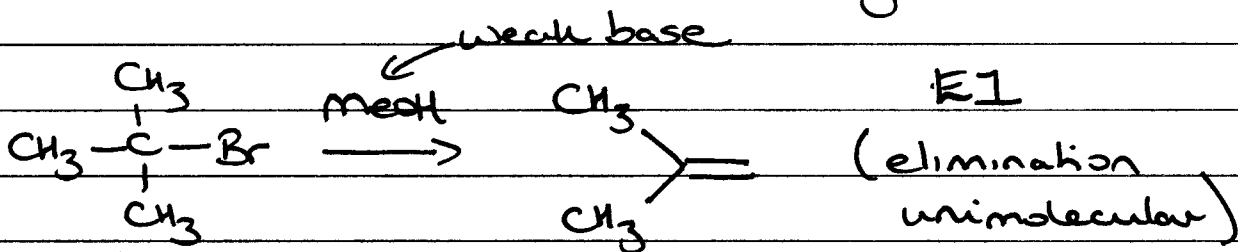
① β -ELIMINATION

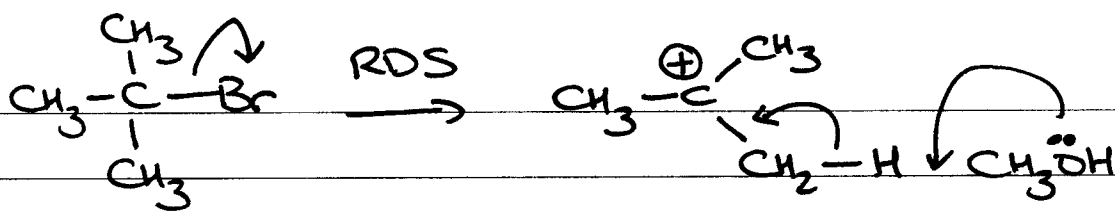


ZAITSEV'S RULE \rightarrow major product is the most substituted alkene (more STABLE)

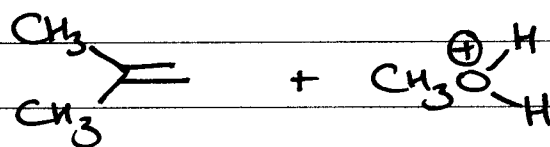
② MECHANISMS

(like S_N reactions, two limiting ones)

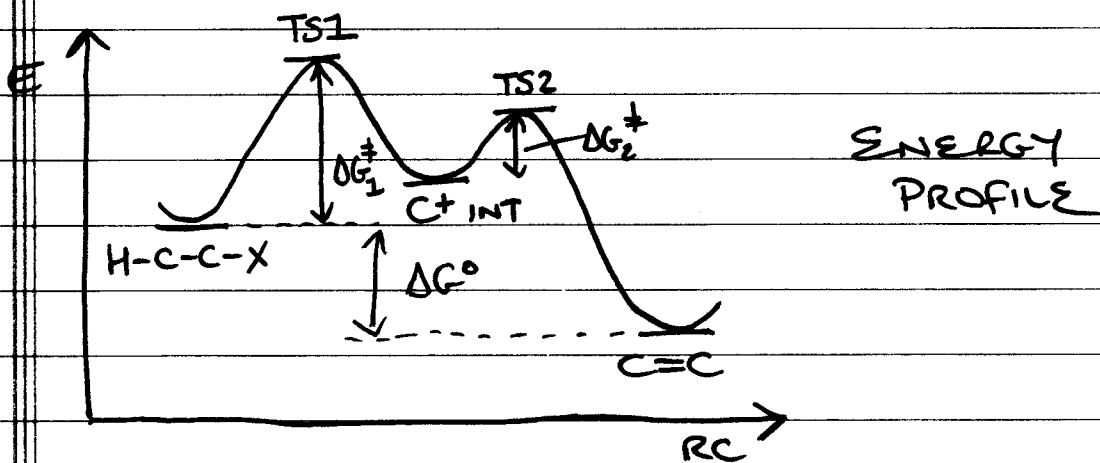




Competes with $\text{S}_{\text{N}}1$ reaction



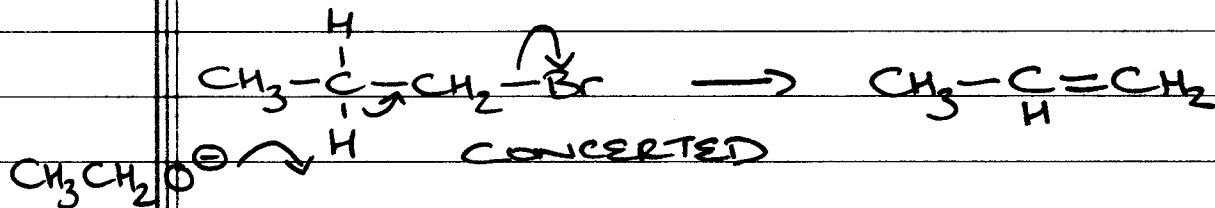
$$\text{rate} = k_1 [(\text{CH}_3)_3\text{C}-\text{Br}]$$



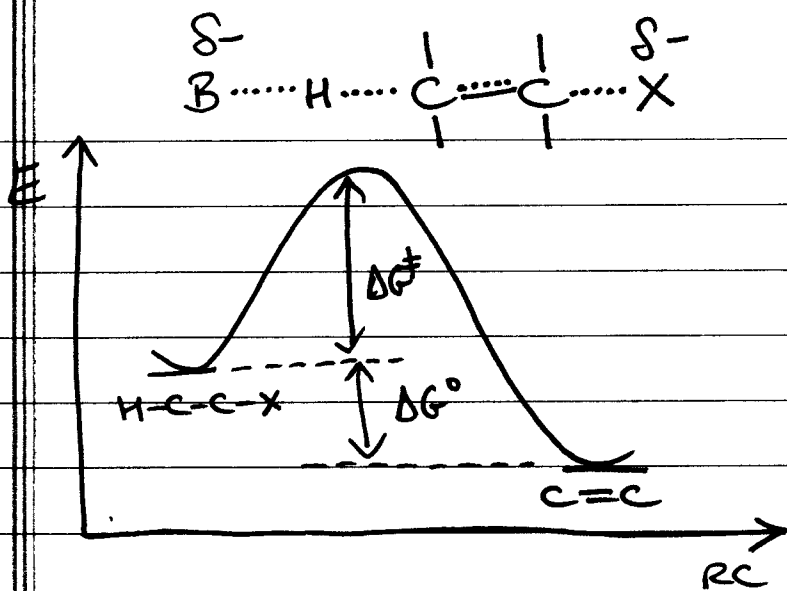
E2 (ELIMINATION BIMOLECULAR)



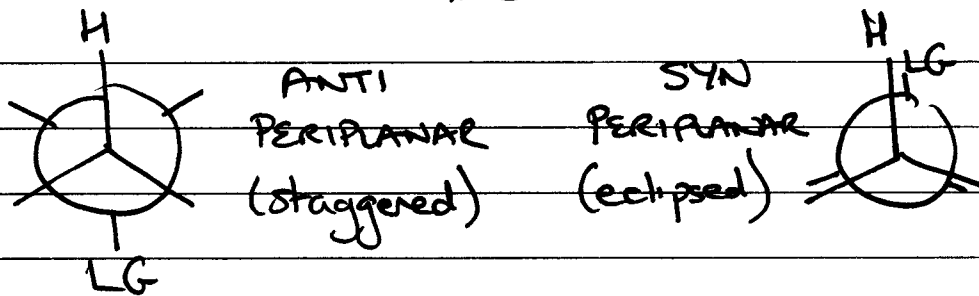
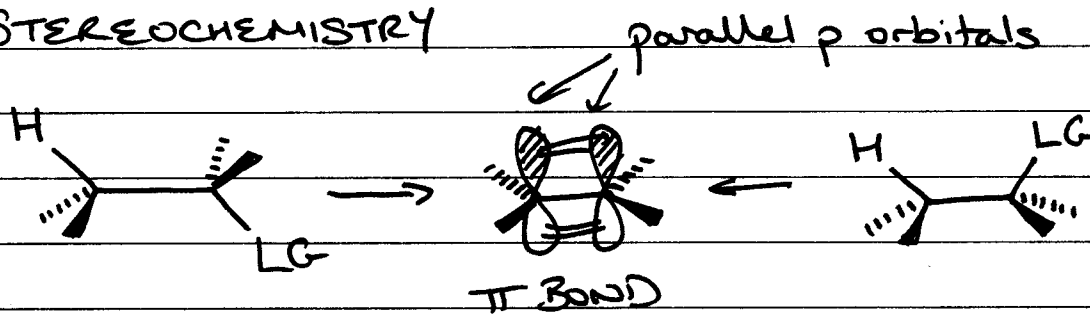
(competes with $\text{S}_{\text{N}}2$)



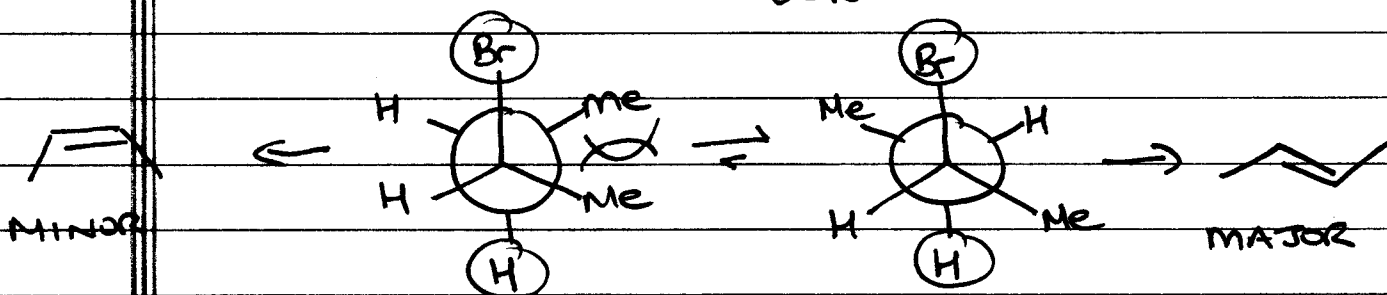
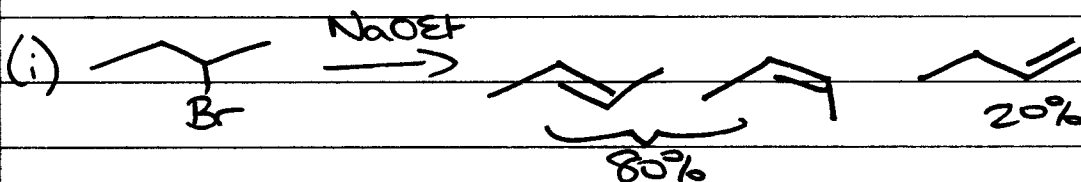
$$\text{rate} = k_2 [\text{~Br}] [\text{Base}]$$

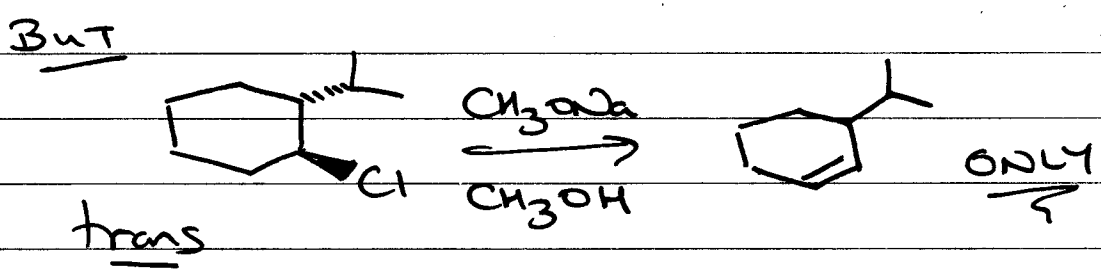
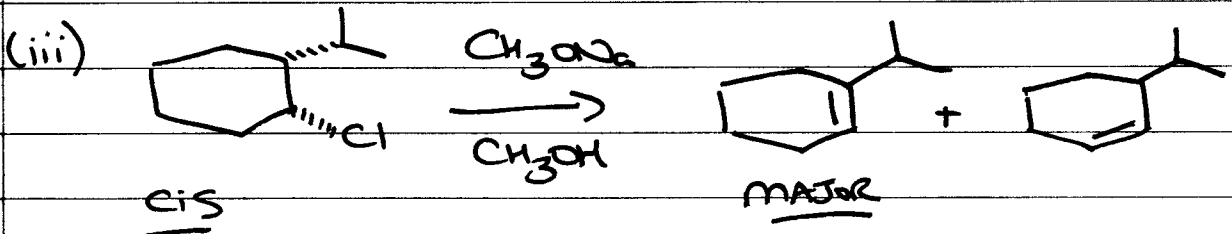
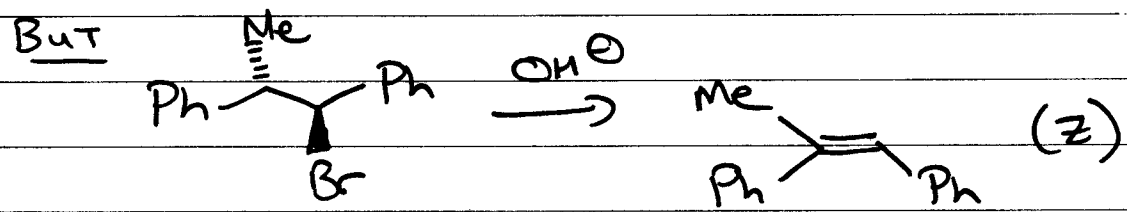
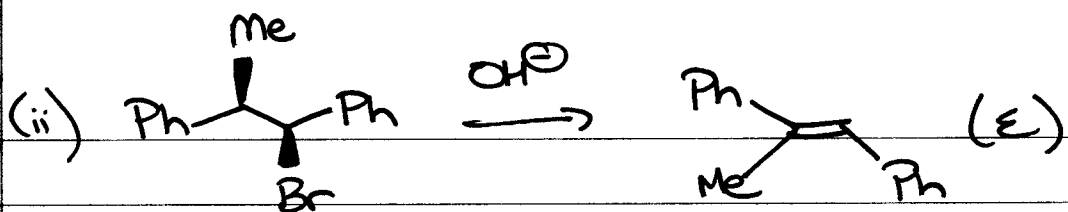


③ STEREOCHEMISTRY



Generally, antiperiplanar geometry is preferred in an E2 reaction (exceptions)





also, cis reacts faster => WHY?

