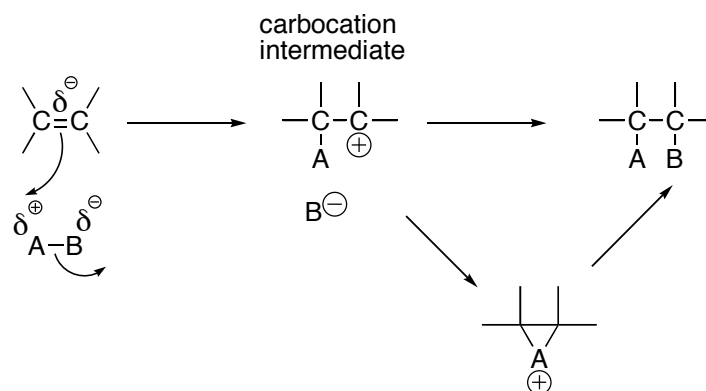
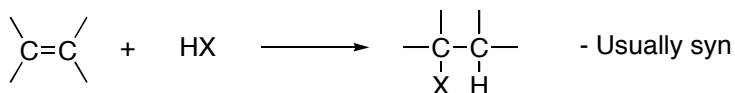


Addition reactions of alkenes

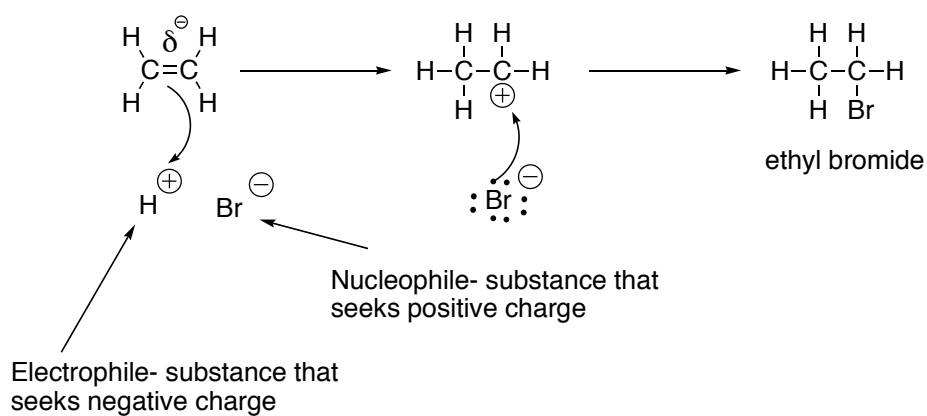


Hydrogen Halide Addition (HX)

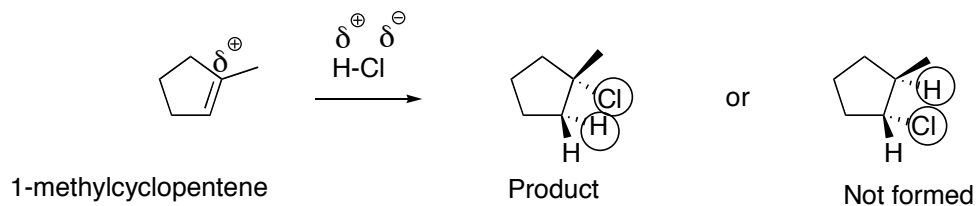
General reaction



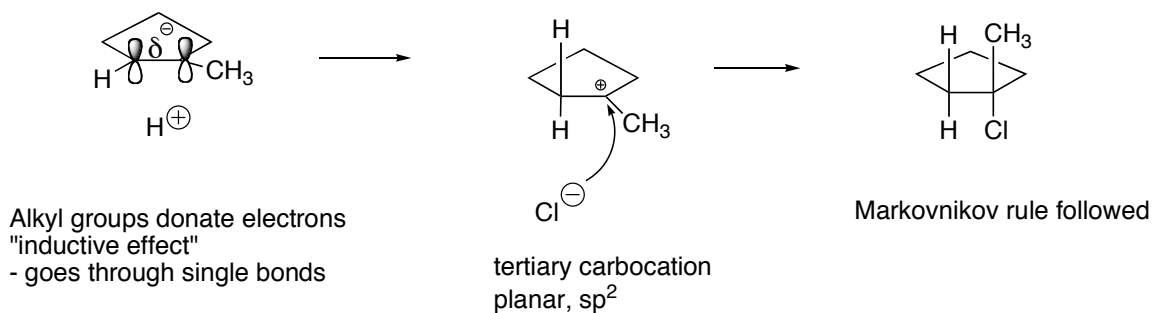
Eg 1.



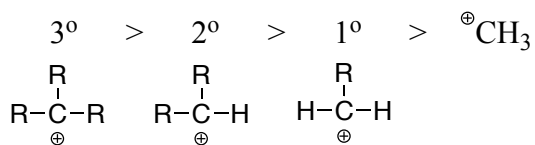
Eg 2.



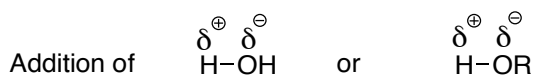
Explanation-



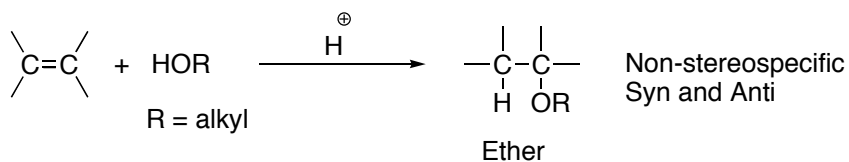
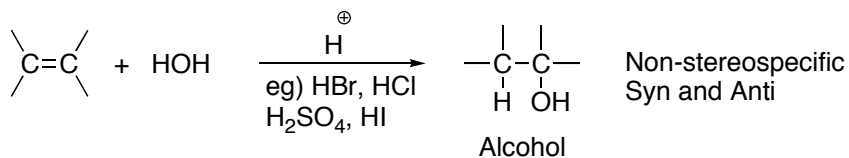
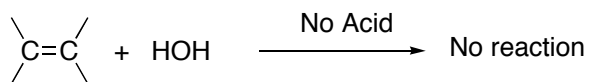
Stability of Carbocations



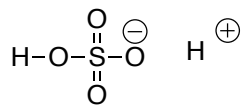
Hydration and Ether formation



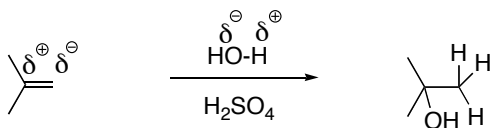
General Reactions



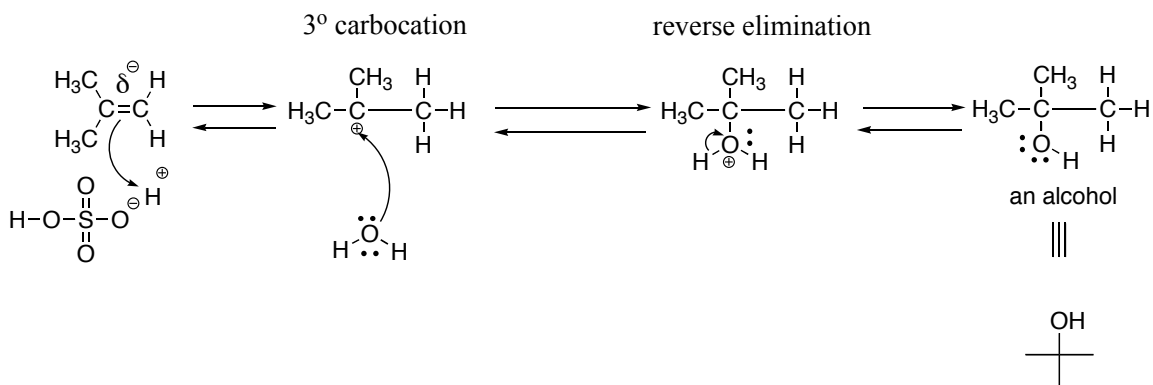
Sulfuric acid has a non-nucleophilic counter ion



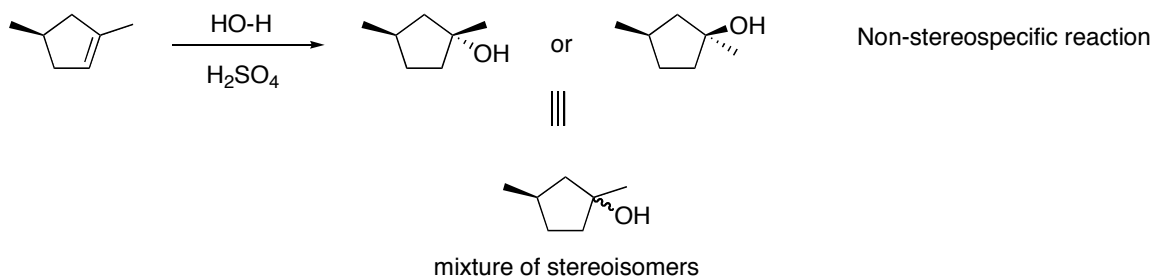
Eg 1.



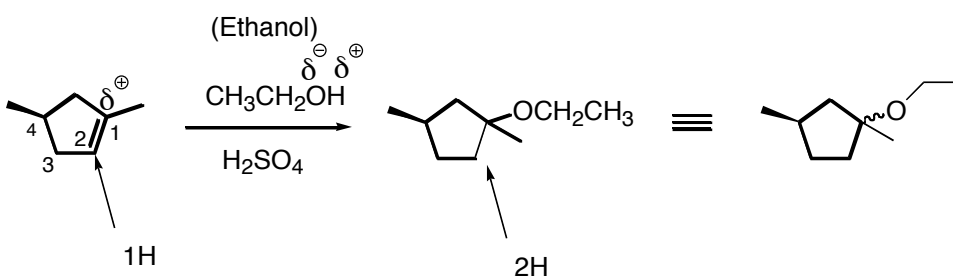
Mechanism:



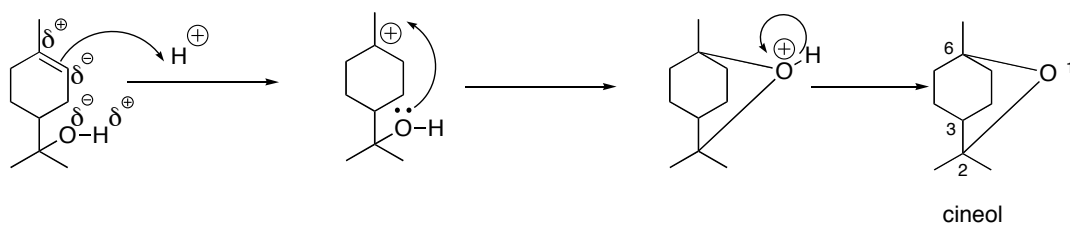
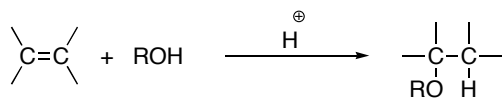
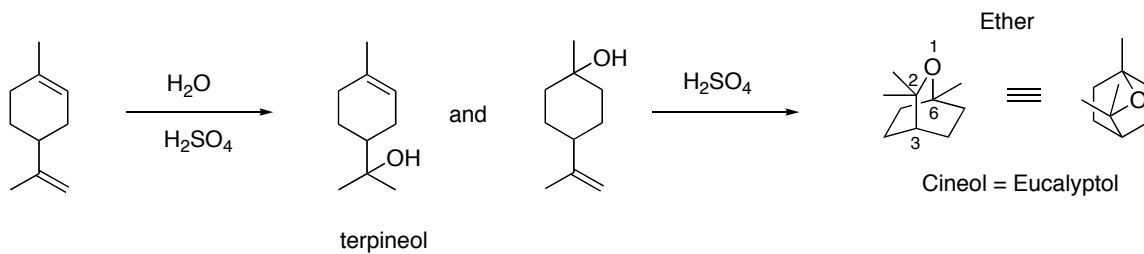
Eg 2.



Eg 3.



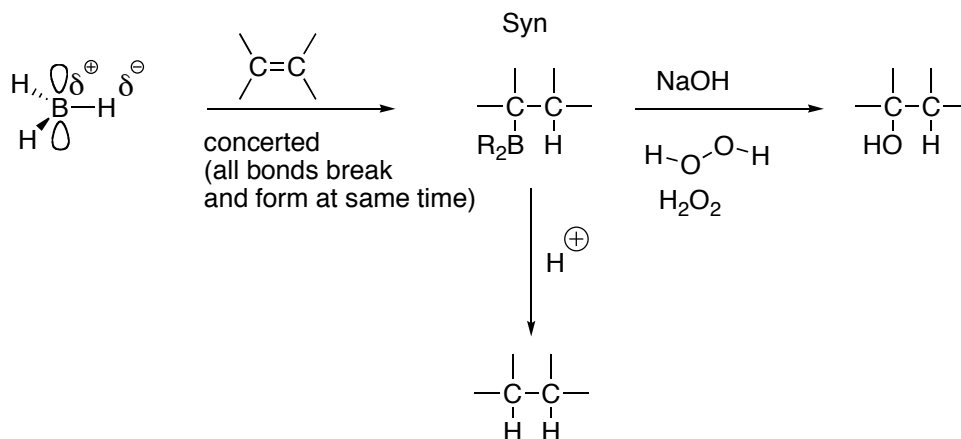
Eg 4. Intramolecular



Hydroboration
General

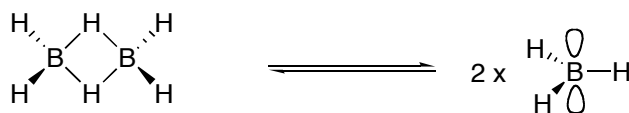
Protonation (alkane)

Oxidation (alcohol)

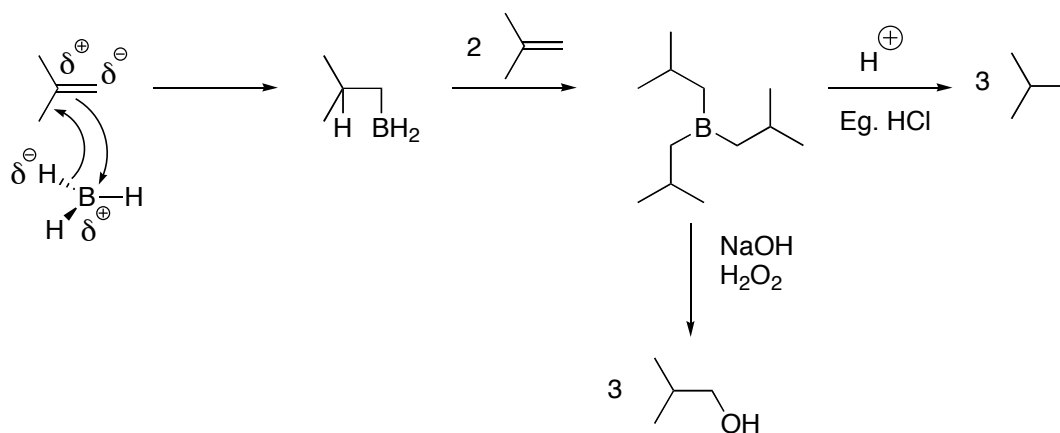


Formally Anti-Markovnikov
Addition of H-OH in opposite sense.

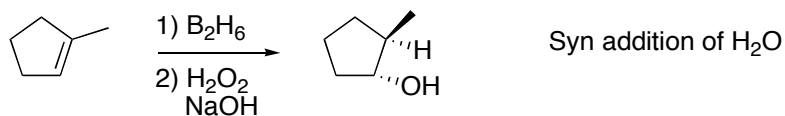
B₂H₆ – diborane behaves like BH₃



Eg 1.



Eg 2.



Overall anti-Markovnikov addition of water