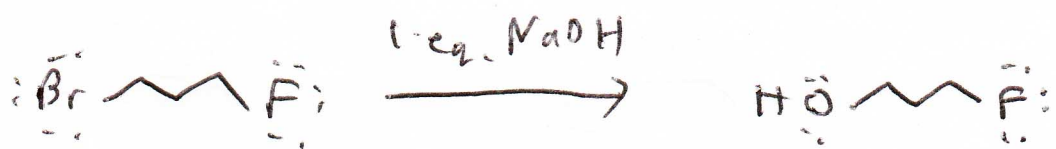
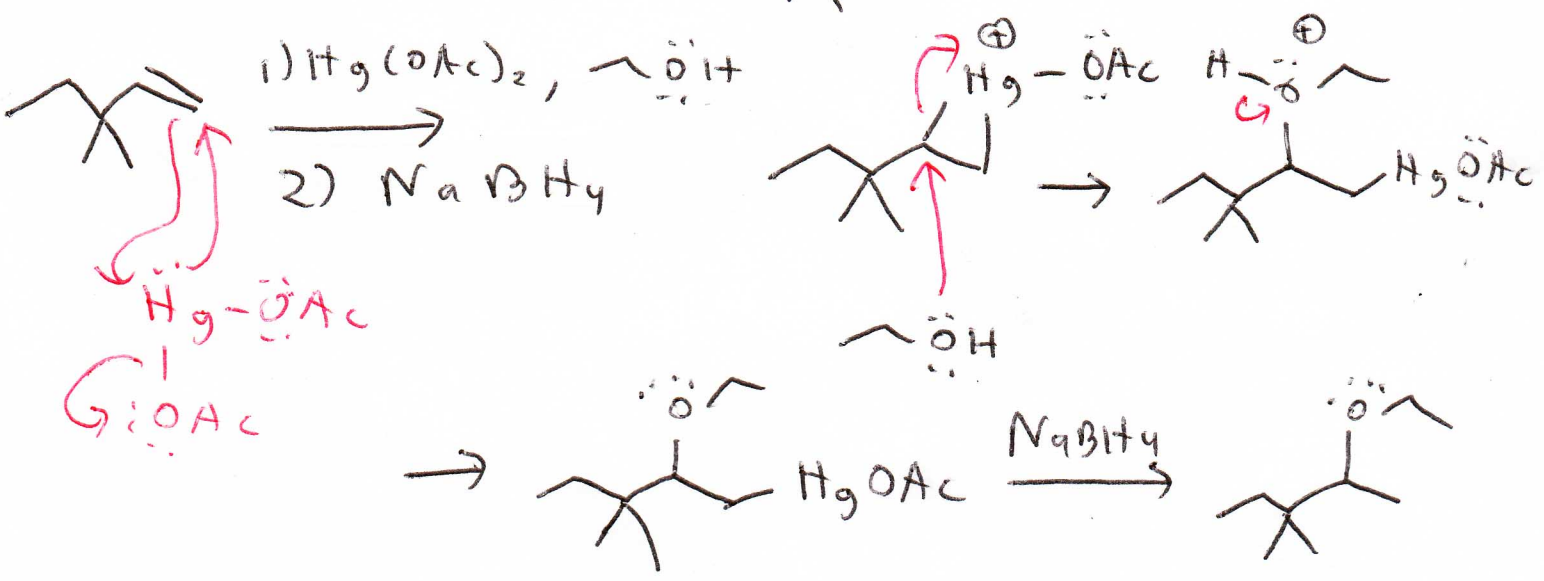
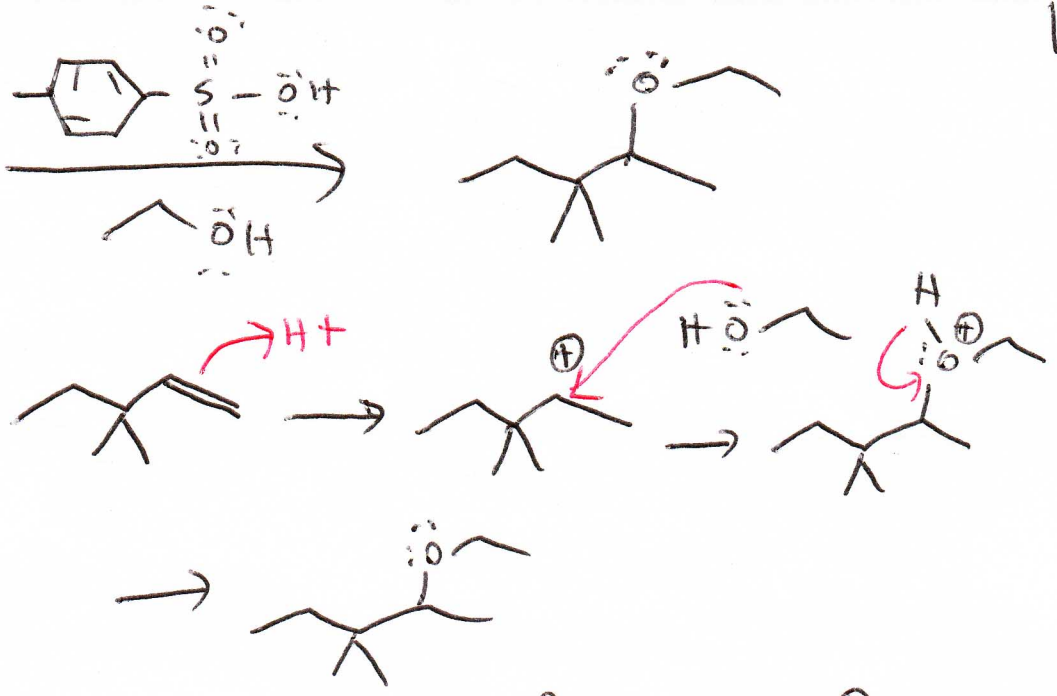
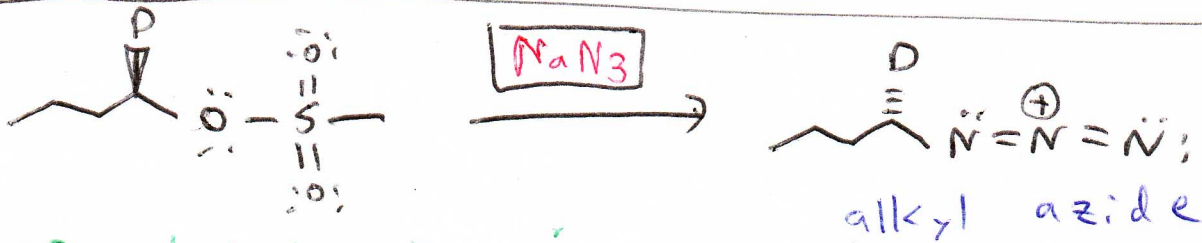




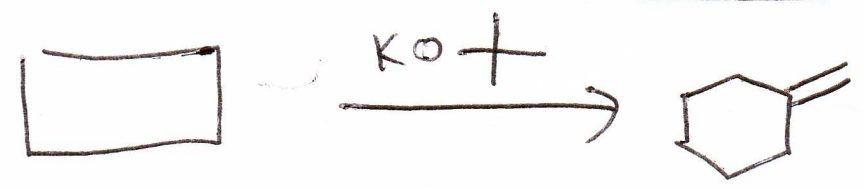
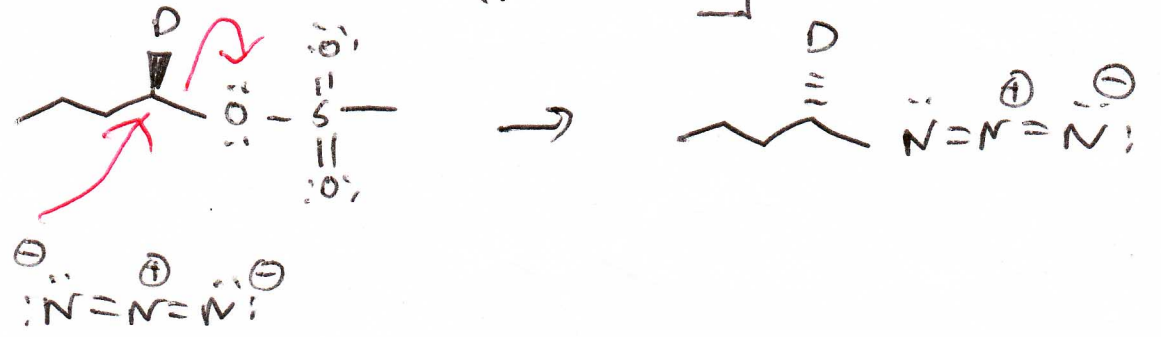
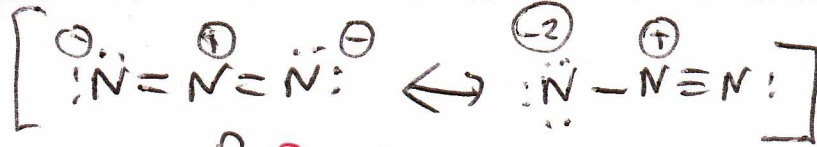
not an alkyl halide or sulfonate



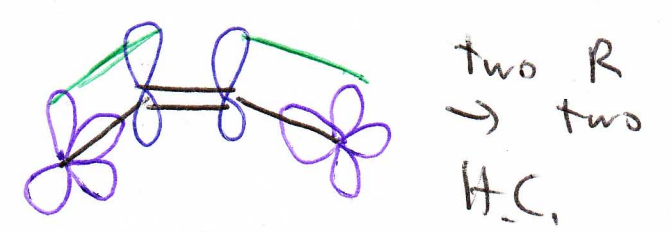
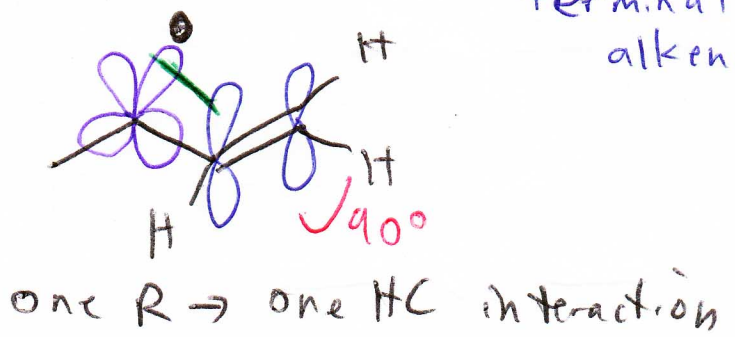
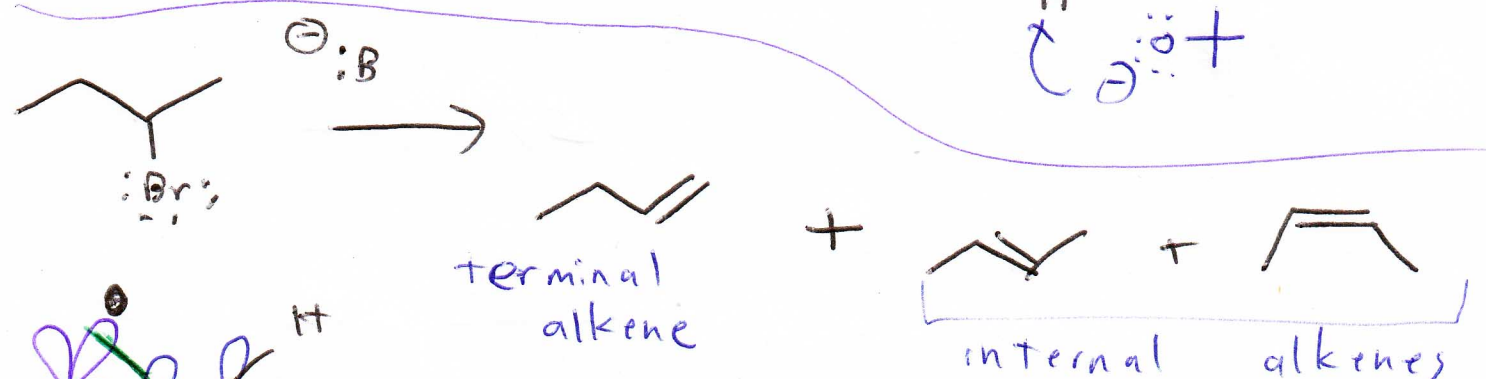
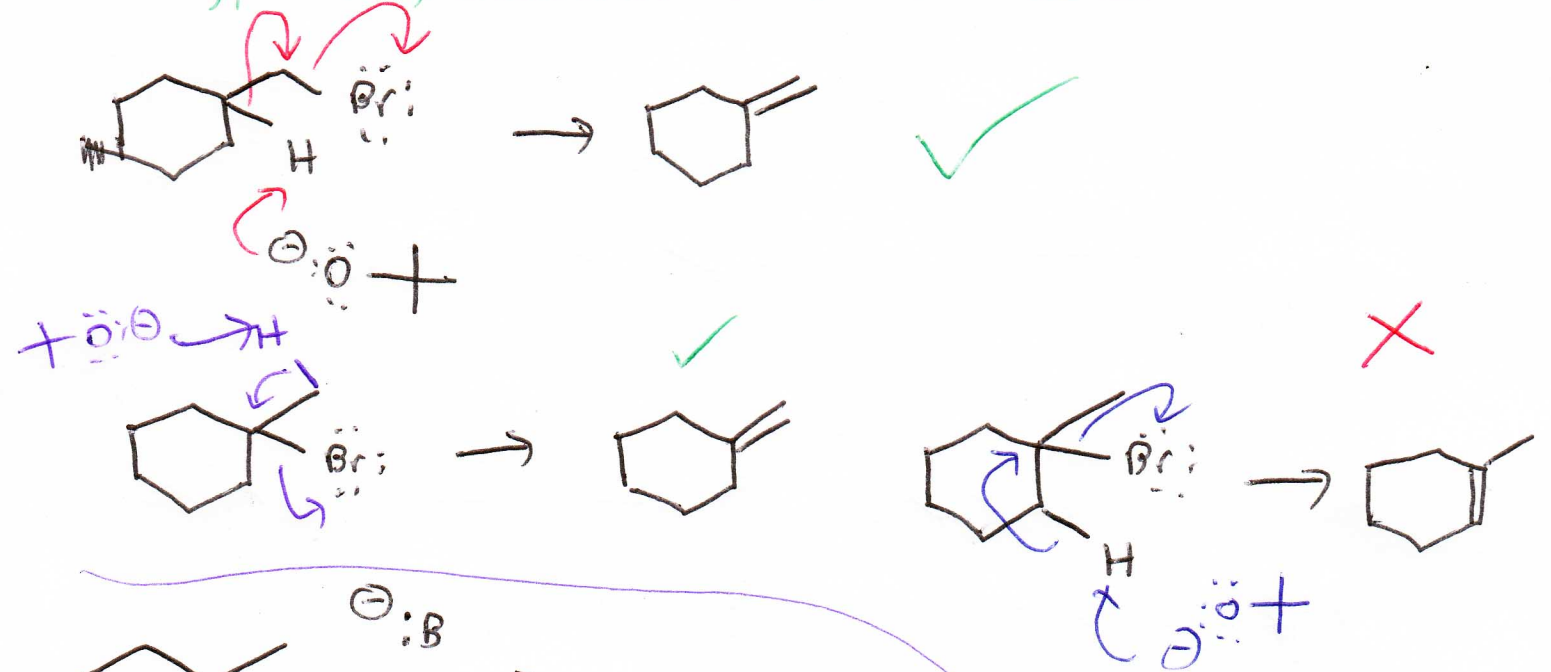
1° substrate; strong, non-hindered basic nucleophile → S_N2



1° substrate, inversion, substitution → S_N2 → good nucleophile



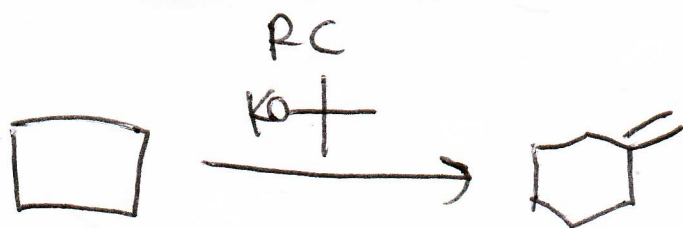
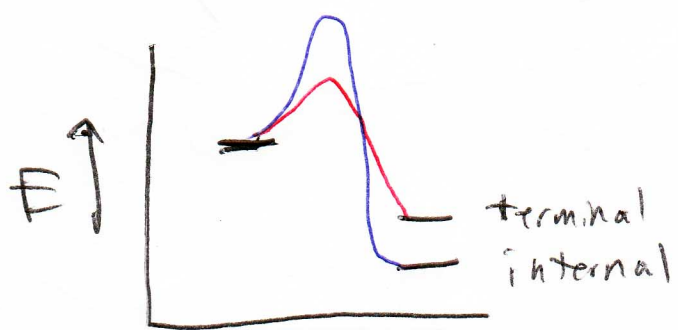
strong, basic, hindered Nu: \rightarrow E2



When comparing a series of isomeric alkenes, #3 the more substituted alkene will generally be the thermodynamically most favored alkene. Also, trans alkenes are more stable than the related cis alkenes due to lower steric hindrance between substituents.

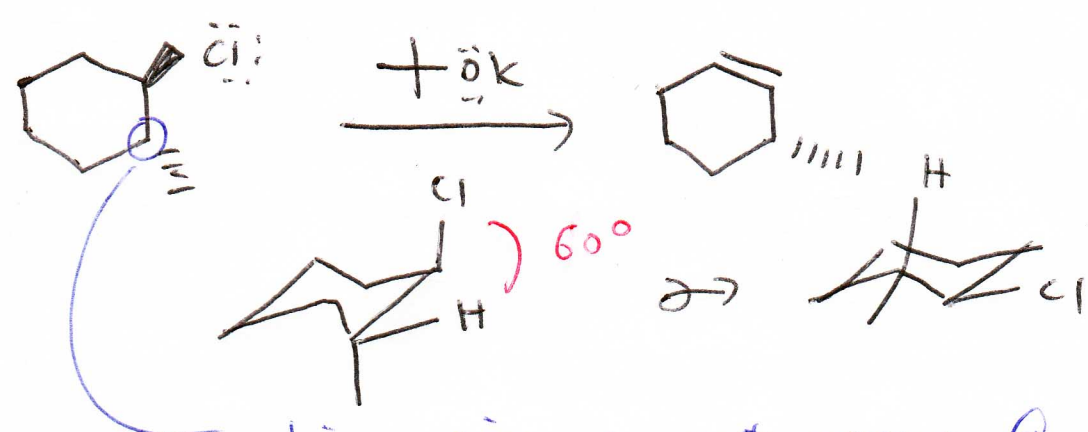
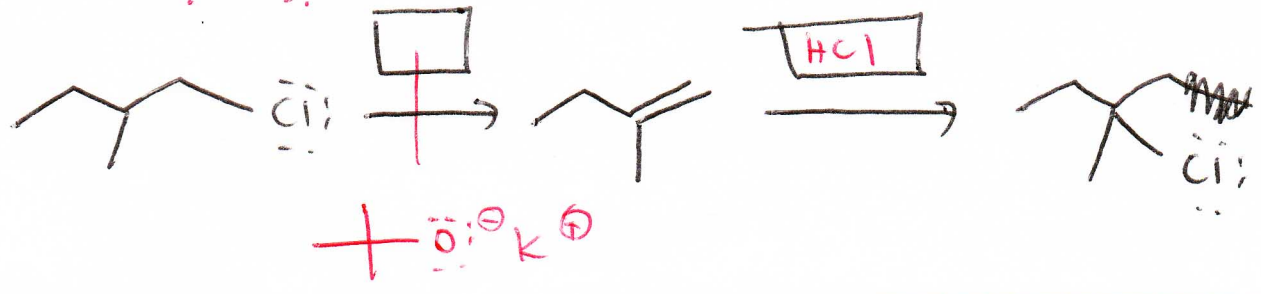
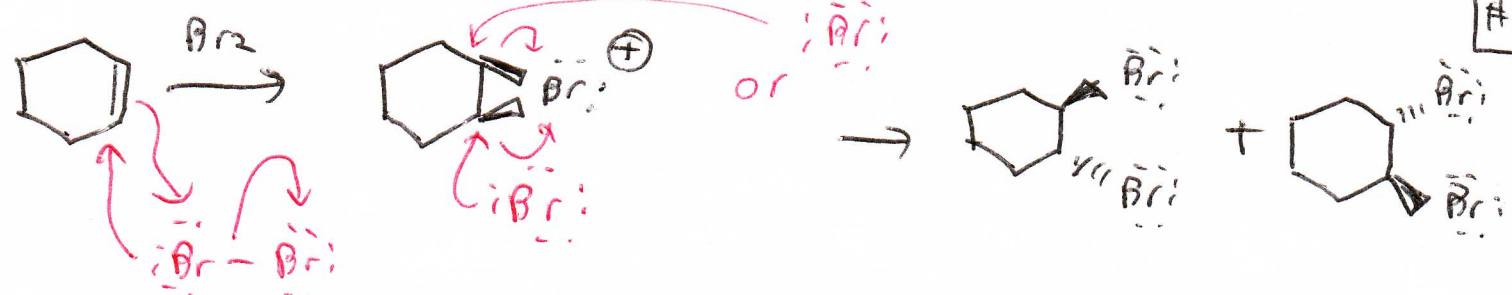
Zaitsev elimination - during elimination, the thermodynamically more stable alkene tends to form.

If the base used in elimination is very bulky (has a great amount of steric hindrance), it is possible to ~~form~~ cause anti-Zaitsev elimination (less substituted, less thermodynamically favorable product). This occurs because the steric hindrance of the base could cause the elimination of a hydrogen from a less substituted position to occur due to it being easier kinetically.

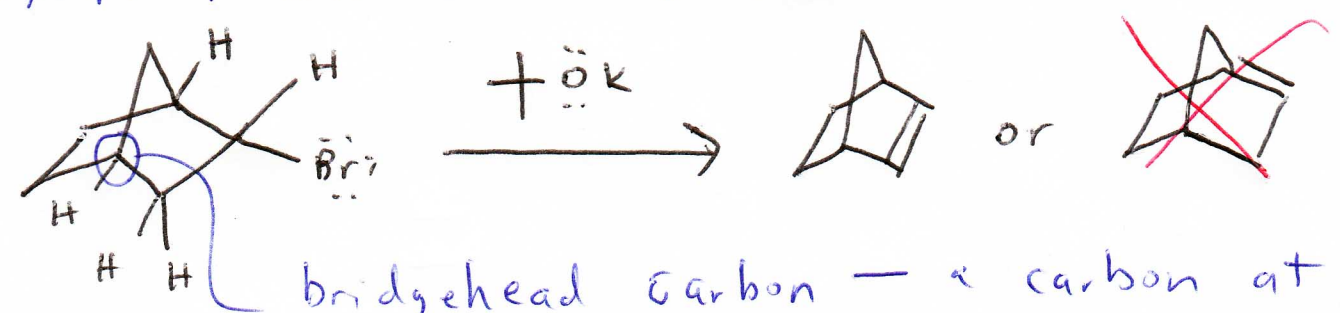


or





elimination cannot occur @ this position since the H cannot ever become synperiplanar or antiperiplanar to the L.G.



bridgehead carbon - a carbon at the junction of two fused rings.
 Bredt's rule - elimination is not possible to a bridgehead position unless the rings involved are large.