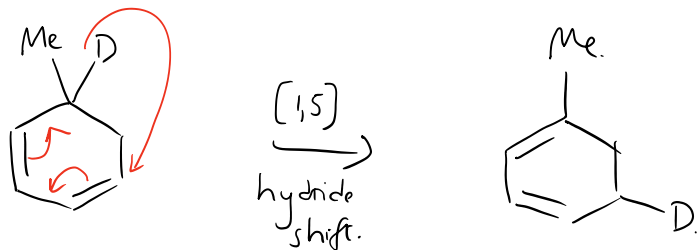


# Hydride Shift

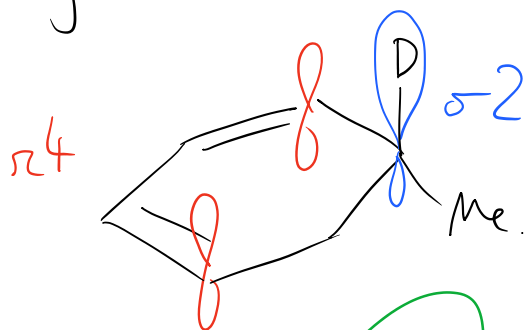
14 March 2017 14:22

Reaction:



Driving force -  
formation of  
trisubstituted alkene.

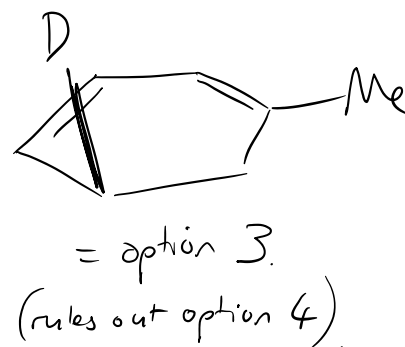
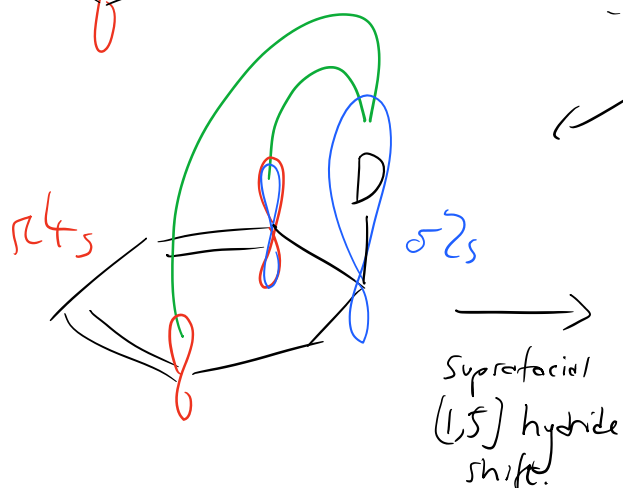
Stereochemistry - need to consider orbitals:



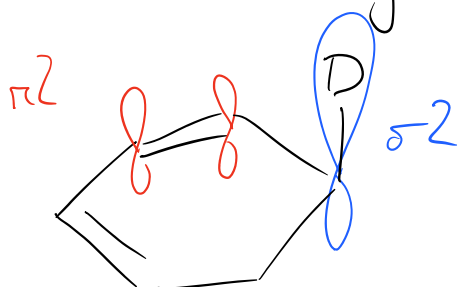
We need  $(4q+2)_s + (4r)_a = \text{odd}$

→ Both components must be  
suprafacial [or both antarafacial, gives  
same result]

- Assume suprafacial

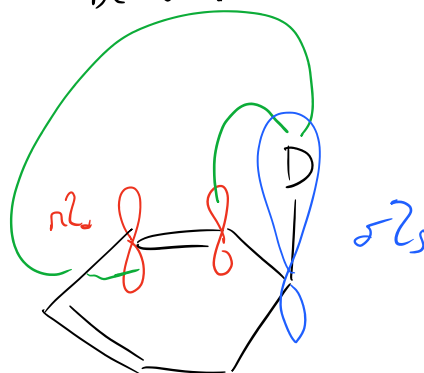
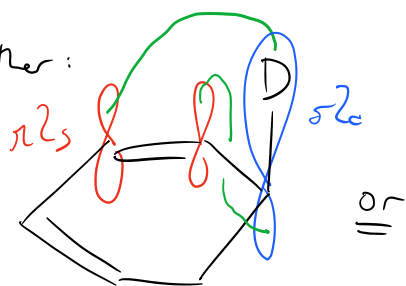


Why not a [1,3]-shift to give ① or ②?



Now we would need one component  
to be antarafacial for  $(4q+2)_s + (4r)_a$  to  
be odd.

So either:



Neither of these is geometrically feasible.