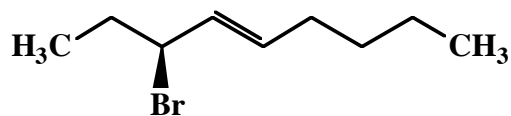


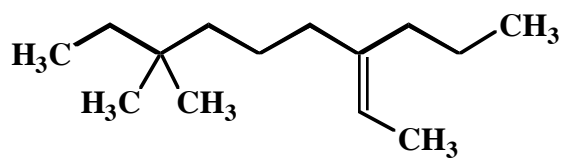
Week 9 Group Questions

1. Use the IUPAC nomenclature rules to write the systematic name for both of the following compounds.

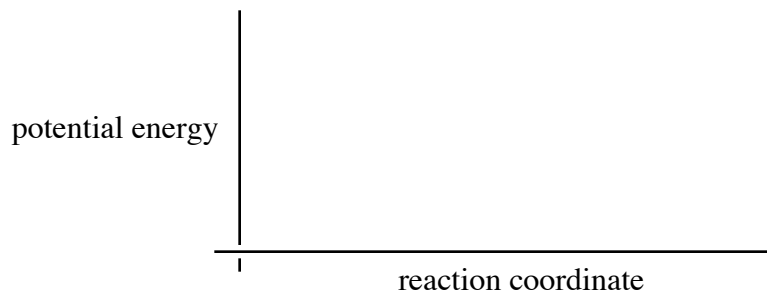
a.



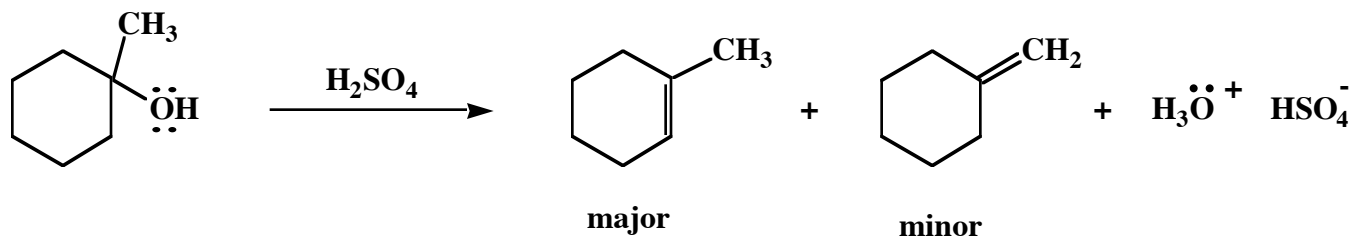
b.



2. Explain clearly why changes in base concentration do not affect the observed reaction rate of an E1 elimination. Draw a reaction-energy diagram (graph of potential energy versus reaction coordinate) to illustrate your answer.



3. Draw the mechanism of the following reaction, using the curved-arrow notation to indicate the reorganization of electron density. Show **all** intermediates, lone pairs, formal charges and countercharges where appropriate. Explain why the observed product distribution is obtained.



4. Use a three-dimensional conformation to draw the detailed mechanism of the following reaction. Use this conformation to explain why the observed product is only one stereoisomer.

