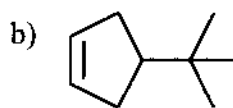
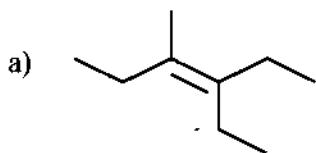


1. Give the IUPAC name of each of the following compounds.

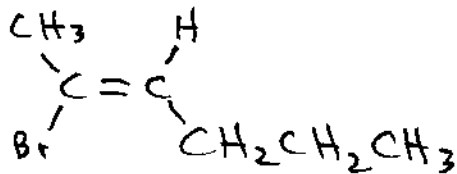


4-tert-butyl-  
cyclopentene

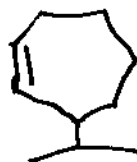
3-ethyl-4-methyl-3-hexene

2. Draw the structure of each of the following compounds.

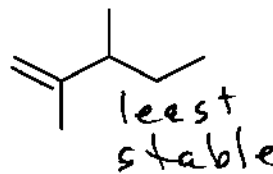
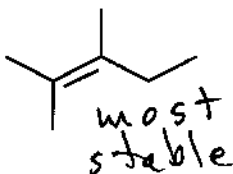
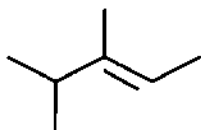
a) (Z)-2-bromo-2-hexene



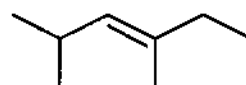
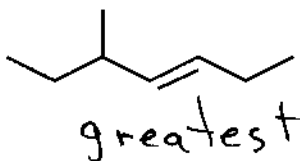
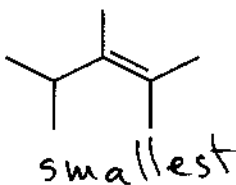
b) 3-isopropylcycloheptene



3. Which of the following compounds is the most stable? Which is the least stable?

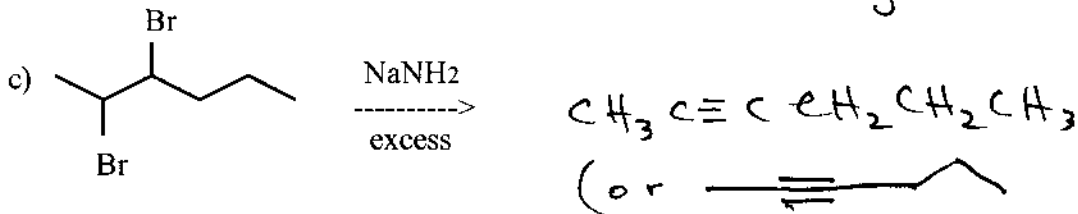
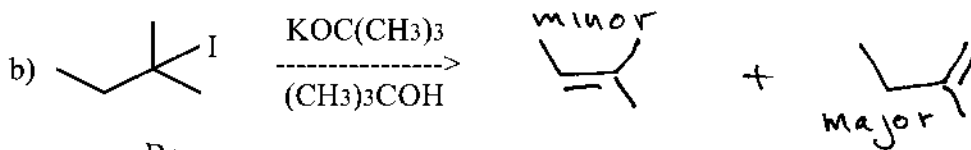
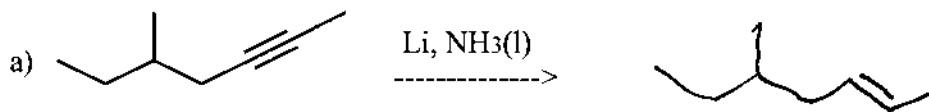


4. Which of the following compounds has the greatest enthalpy (heat) of combustion? Which has the smallest?

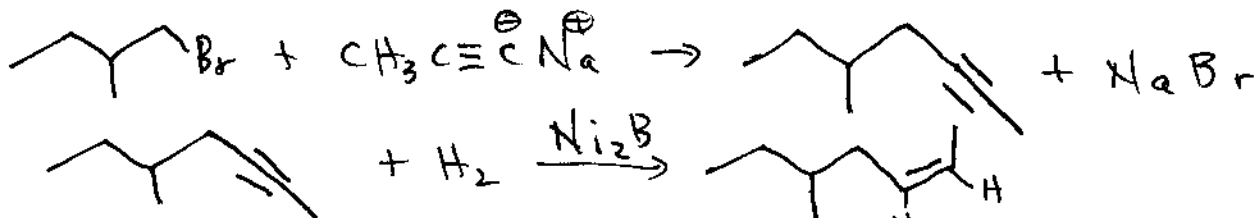
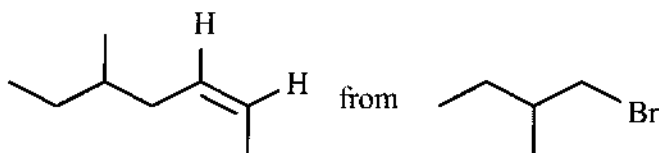


(because  
most  
stable)

5. Predict the products of each of the following reactions. Where there are major and minor products for a reaction, indicate which product is the major one.



6. Propose a synthesis of the following compound from the indicated starting material and any other needed reagents.



7. Propose a complete mechanism for the following reaction.

