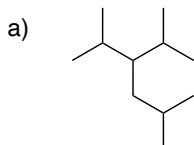


Chem 236 - Homework Assignment #2

Due September 8th, 2023 (Before Lecture Begins)

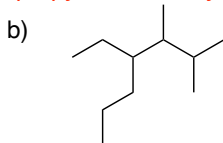
1. Identify why the following names are incorrect. Give the correct name.



3-isobutyl-2,4-dimethyl pentane

the longest chain parent chain is hexane (6 carbons)

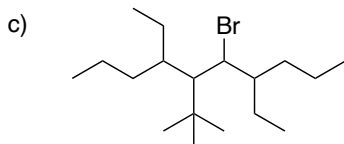
3-isopropyl-2,5-dimethylhexane



2,3-dimethyl-4-propylhexane

the longest chain parent chain is heptane (7 carbons)

4-ethyl-2,3-dimethylheptane

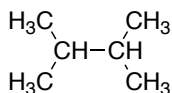


4,7-diethyl-6-bromo-5-tert-butyldecane

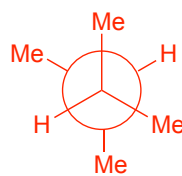
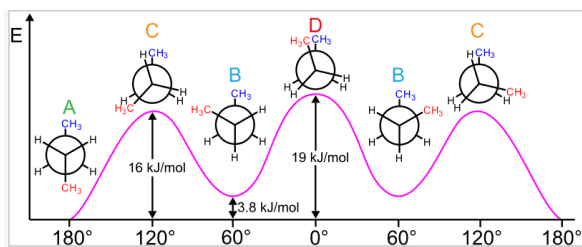
not alphabetical

5-bromo-6-(tert-butyl)-4,7-diethyldecane

2. a) Convert the following structure into a Newman Projection looking down C2 and C3.



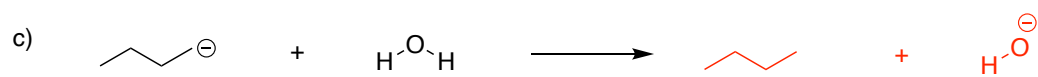
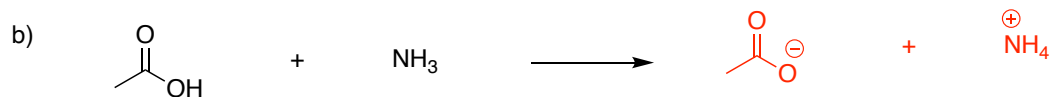
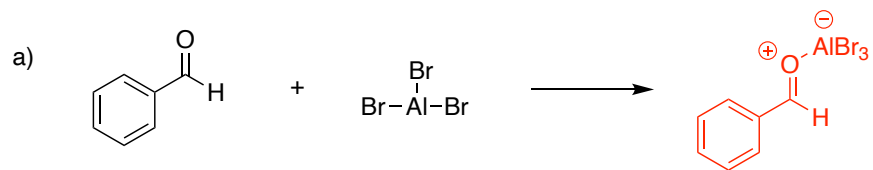
b) Draw the entire Energy vs. Torsional angle plot.



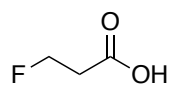
c) Identify the second highest energy conformer and justify your choice.

see above

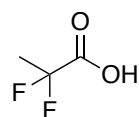
3. Draw the curved arrow mechanism for the following reactions and identify the product.



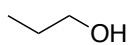
4. Rank the following from least to most acidic.



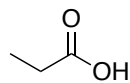
(I)



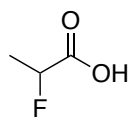
(II)



(III)



(IV)



(V)

III < IV < I < V < II