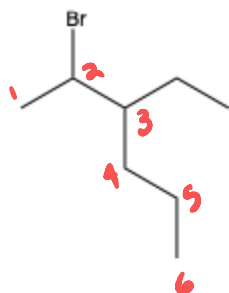
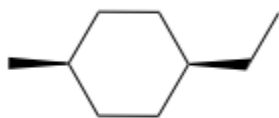


CHEM 2300 Solution 2

1. Name or draw the following compounds

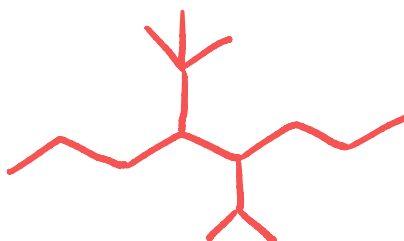


2-bromo-3-ethylhexane

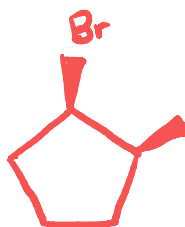


cis-1-ethyl-4-methylcyclohexane

4-tert-butyl-5-isopropyloctane



cis-1-bromo-2-methylcyclopentane



or

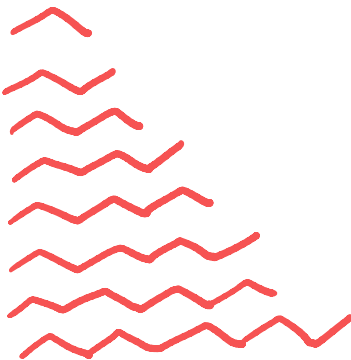


2. Write out all of the hydrocarbon names from one carbon to ten carbons.

methane CH_4

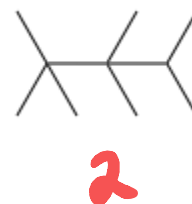
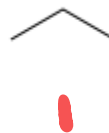
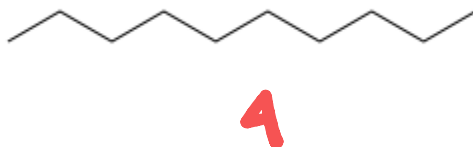
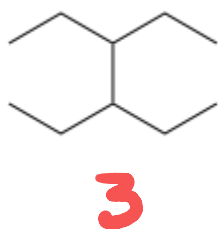
ethane —

propane
butane
pentane
hexane
heptane
octane
nonane
decane



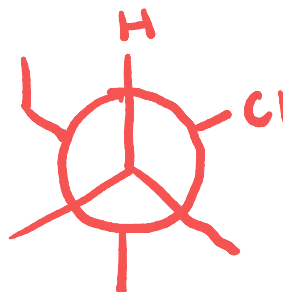
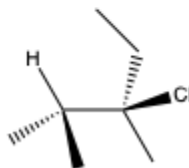
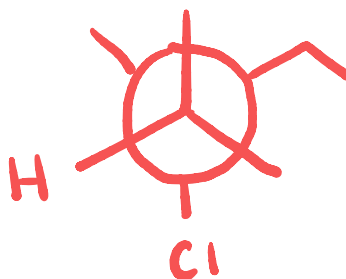
3. Rank the following from lowest boiling point to highest boiling point.

1=lowest 4=highest



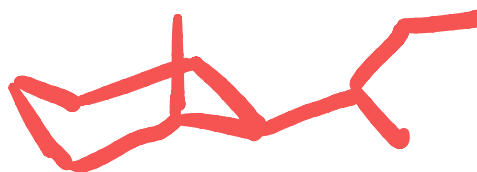
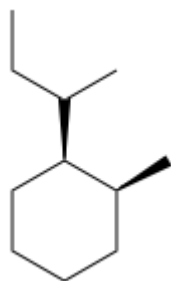
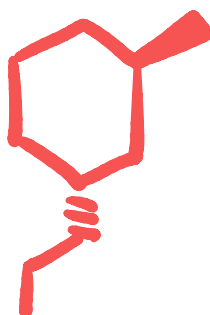
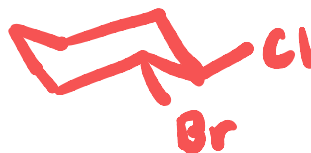
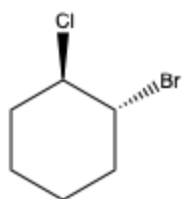
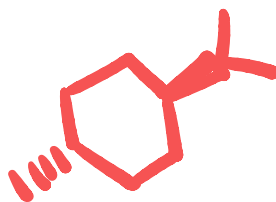
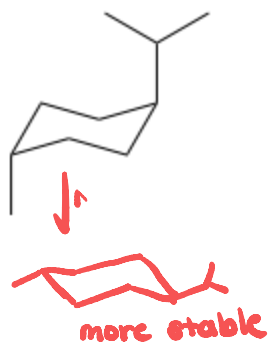
more branched ↓ boiling point

4. Draw the staggered newman projection of the following compounds. Are these isomers and if so what kind?

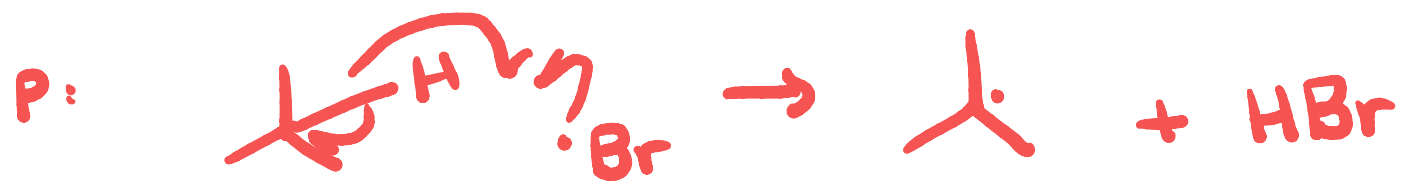


These are conformational isomers

5. Draw either the flat drawing or the chair drawing for the following cyclohexane molecules. Are the chair drawings in their most stable conformation? If not, draw them in their more stable conformation (even the ones I gave you might not be in their most stable form).



- I did not put all lone pairs but they would still be there
6. Draw a plausible initiation, propagation, and termination mechanism for the monobromination of 2-methylpropane. How many major products (excluding byproducts) are possible?



this would have the same mechanism