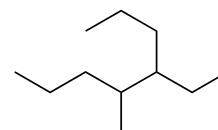
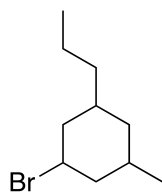
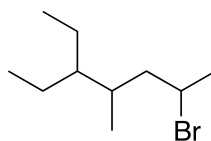
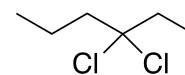
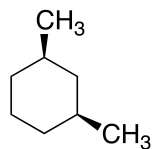
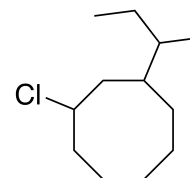
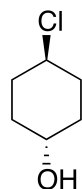
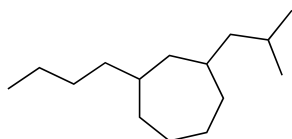
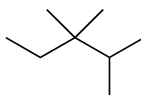
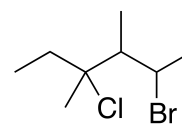
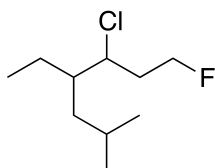
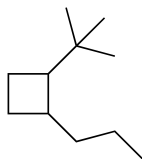
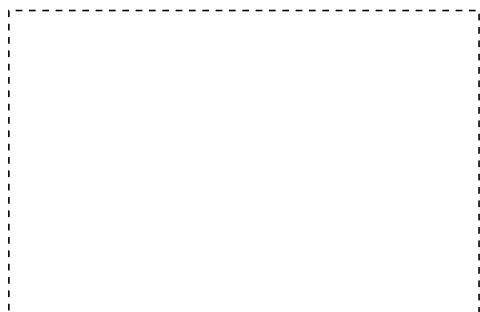


CEM 251, Problem Set 2: Chapter 2

1. Provide IUPAC names for the following structures:



2. Provide the correct structures for the following names:



1-bromo-2,2-dimethylpropane



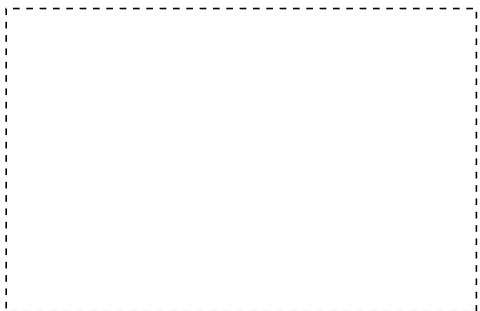
1,1,1-trichloro-3-ethyl-5-methyloctane



4-(1-methylethyl)nonane



3-hydroxy-2-methyl-5-nitrohexane



1-sec-butyl-4-isopropylcycloheptane



cis-1,3-dimethylcyclobutane



trans-1-amino-2-iodocyclohexane



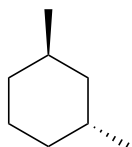
5-butyl-3-isobutyl-1-pentyl-4-propylcyclohexane

3. Draw the most stable Newman projection of 1,2-dibromoethane.

4. Draw the most stable Newman projection of pentane looking down the C2-C3 bond.

5. Draw the two chair conformers of 1-bromocyclohexane and indicate which one is more stable:

6. Convert the following stick structure to the appropriate chair conformer(s).



7. Draw the bond rotation energy diagram for 2-methylbutane (looking down the C2-C3 bond) with the Newman projections for each point

