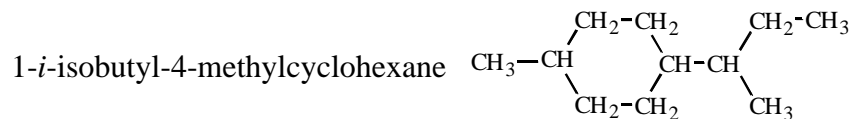
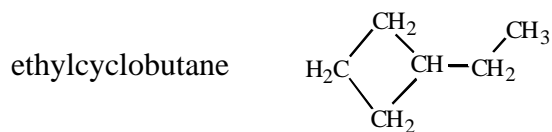
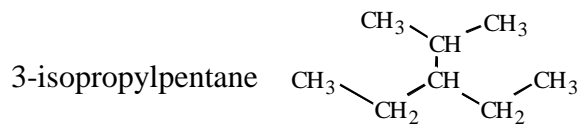
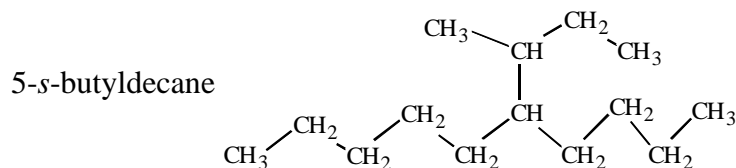
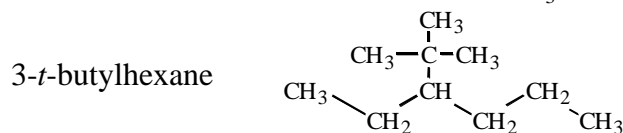
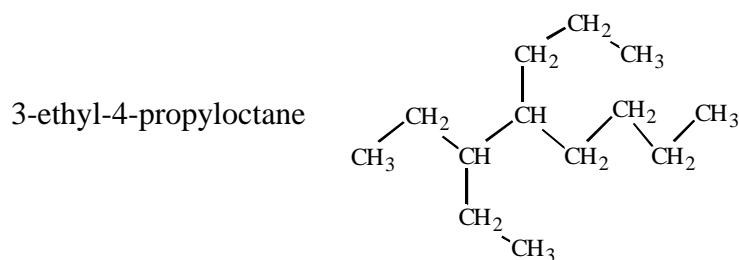
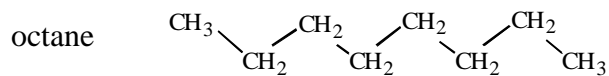
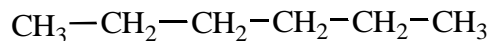


Alkanes Homework Key

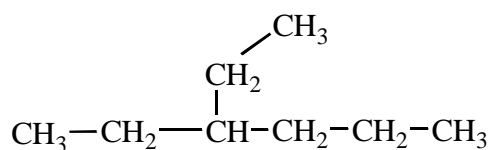
Draw the structures of the following alkanes. Use both groups connected to each other and stick structures. For example:



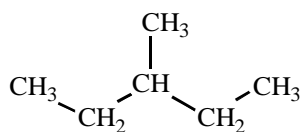
What is the correct systematic name (both new & old (if applicable)) for the following structures?



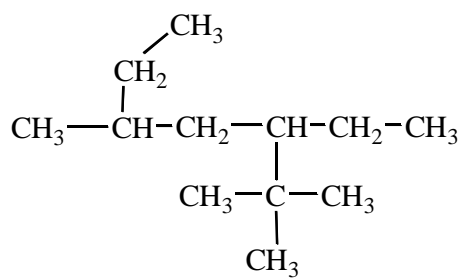
n-hexane



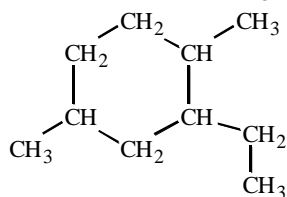
3-ethylhexane



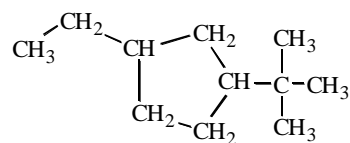
3-methylpentane



3-ethyl-2,2,5-trimethylheptane
3-*t*-butyl-5-methylheptane

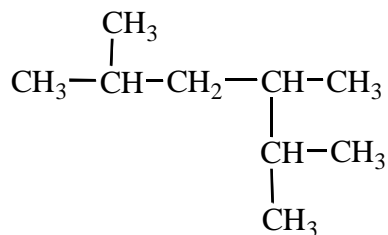


1-ethyl-2,5-dimethylcyclohexane



1-*t*-butyl-3-ethyl-cyclopentane

What is wrong with the following name for the associated structure? Fix the problem.



2-methyl-4-isopropyl pentane

The chain is actually 6 carbons long. Therefore, the name is 2,3,5-trimethylhexane.