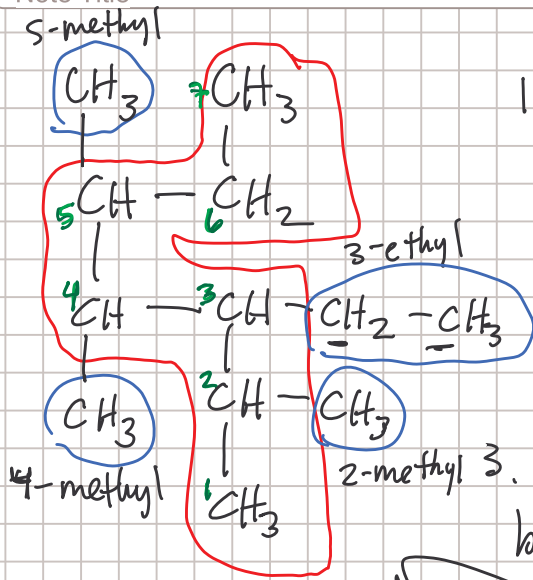


# Ch 3

Note Title

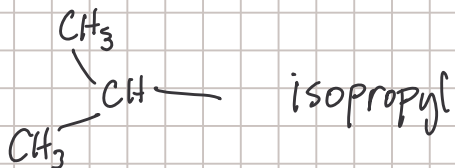
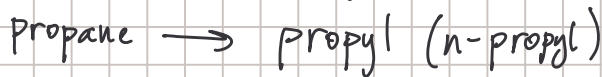
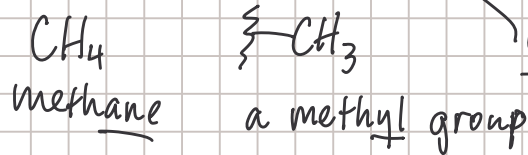
9/12/2005



1. ident. longest continuous chain w/ most substituents (main chain or backbone)

2. # backbone from end nearest 1st substituent

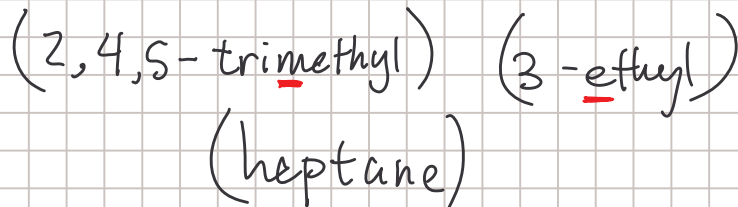
3. name substituents (identify by # C attached to)



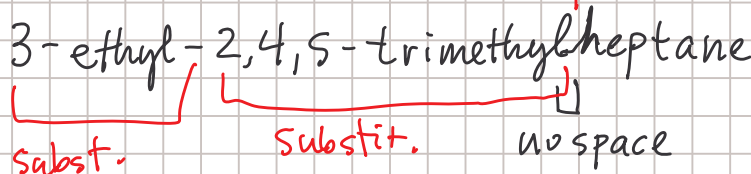
alkyl substituents

4. organize multiple groups together

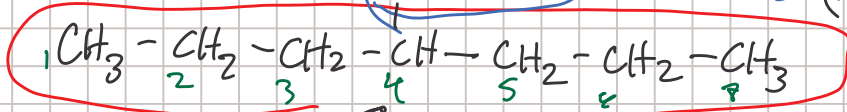
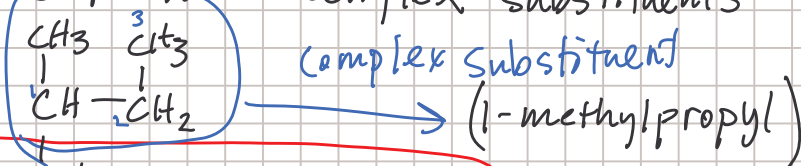
#	prefix
2	di
3	tri
4	tetra
5	pent
6	hexa



name w/ substituents first in alphabetical order (ignore prefix)



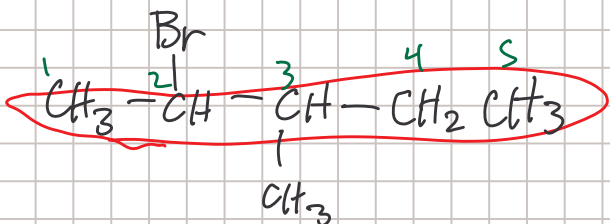
Use parentheses to name complex substituents



4-(1-methylpropyl)heptane

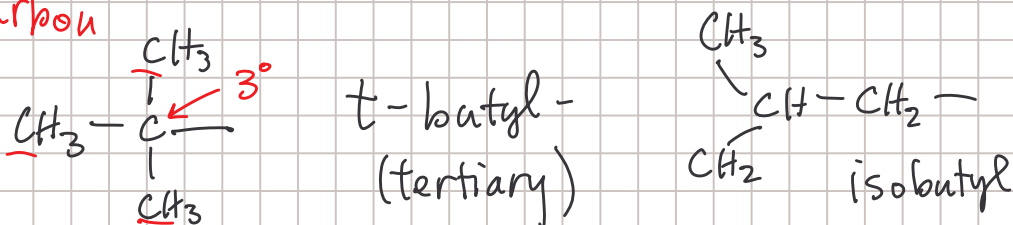
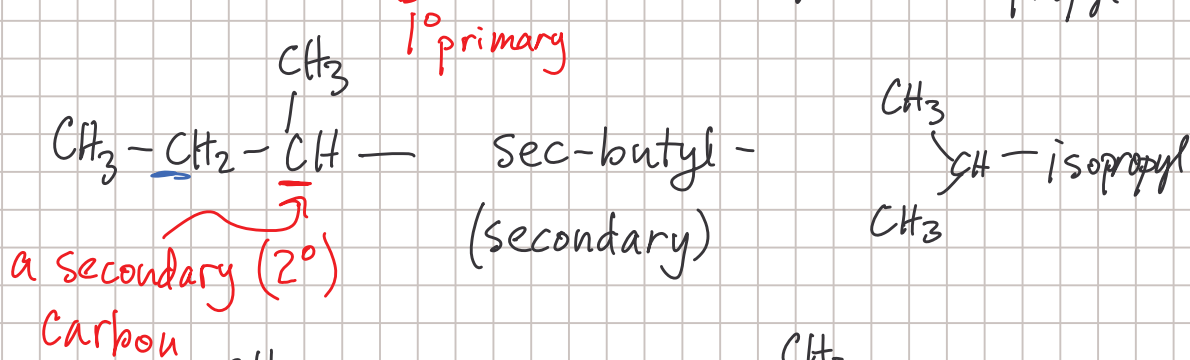
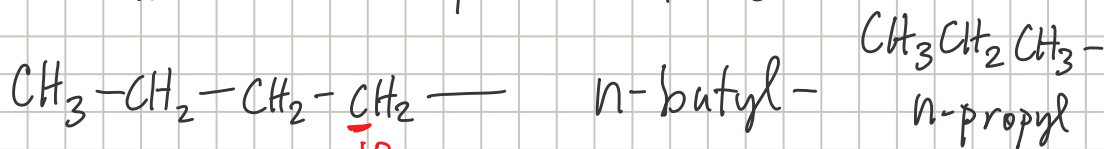
halides

F	fluoro-
Cl	chloro-
Br	bromo-
I	iodo-

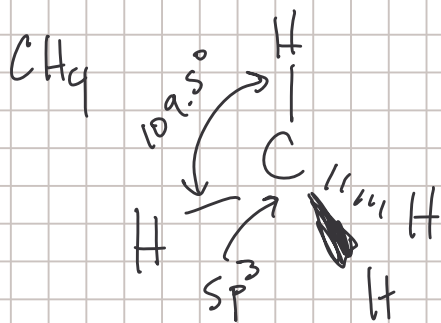


2-bromo-3-methylpentane

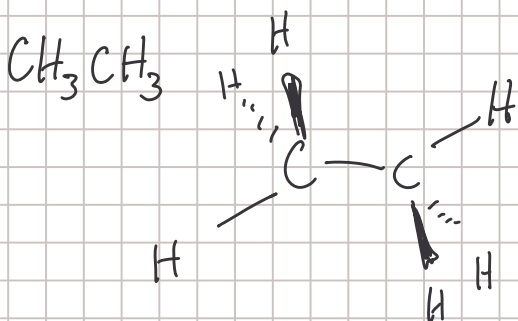
Common names of complex substituents



# Structure of alkanes



tetrahedral structure

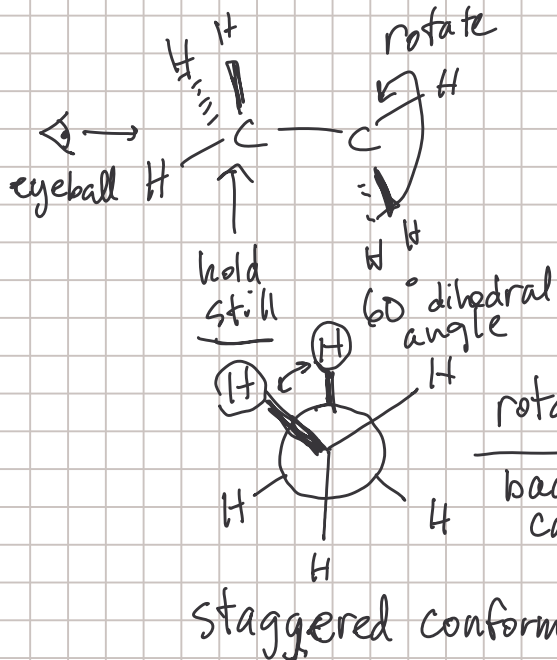


## Conformers

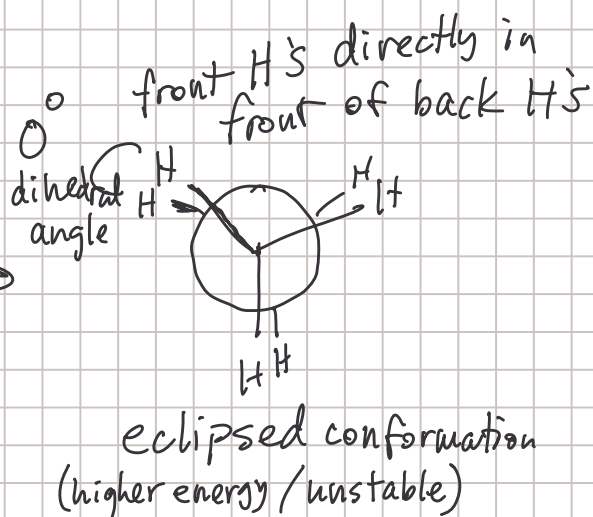
Conformational isomers

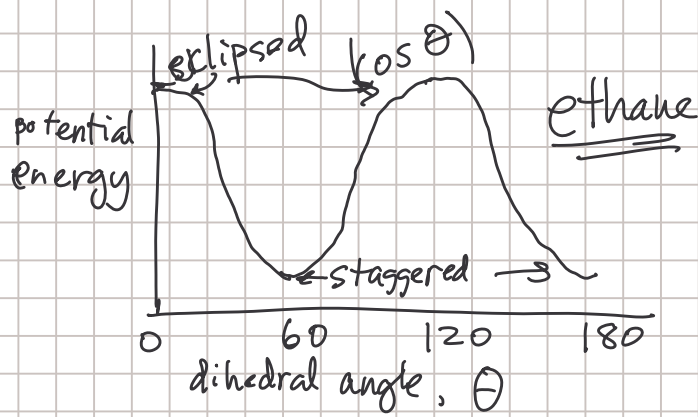
different arrangements of atoms in space as result of rotations about  $\sigma$  bonds.

rotamers : rotation about 1 single bond



Newman Projection  
(side-on)





dihedral angle  
angle between  
the 1st and 3rd of  
3 consecutive bonds

