HOMEWORK ASSIGNMENT #4 ORGANIC CHEMISTRY I (21 pts)

naming alkanes

**(due Monday 24 September 2012)**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.1 Name (using IUPAC rules) or draw us: (1 pt each. Spelling counts) 9 pts total**







2,2-dimethyloctane *\_4-(1-methylethyl)-2,5dimethylheptane*\_ *3-ethyl-2-methylhexane*







*3-chloro-4-(1-methylethyl)-3,6-dimethyl*

Cyclobutylcyclohexane \_\_\_\_*3-ethyl-2,5-dimethylhexane*\_\_\_\_ \_*octane*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_







*1-chloro-2-ethyl-3-(1-methylethyl)cyclohexane* *\_2-bromo-2,8-dimethyl-3,6-* *4-(methylethyl)-5-(1,1-dimethyl* \_\_\_\_ *dipropylnonane* *ethyl)-5-fluoro-3-methylunidecane*

**4.2 Name the compounds below using both IUPAC and common naming systems (12 pts total)**



*Sec-pentyl fluoride* or

Common \_*n-butane\_\_\_\_\_\_\_\_\_\_ sec-fluoropentane\_\_\_\_\_\_\_ isobutyl chloride\_\_\_\_*

IUPAC *\_\_\_butane\_\_\_\_\_\_\_\_\_\_\_ 2-fluorohexane\_\_\_\_\_\_\_\_\_\_ 1-chloro-2-methylpropane*

Common \_*neopentane\_\_\_\_\_ t-butyl bromide\_\_\_\_\_\_\_\_ \_isopropylcyclohexane\_\_*

IUPAC \_*2,2-dimethylpropane\_ \_2-bromo-2-methylpropane\_\_\_\_\_\_ \_(1-methylethyl) cyclohexane\_*

Or *methylethylcyclohexane*