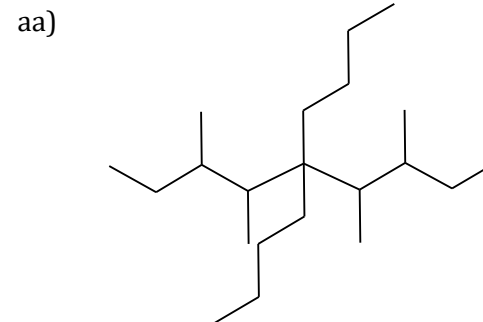
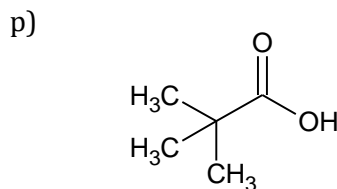
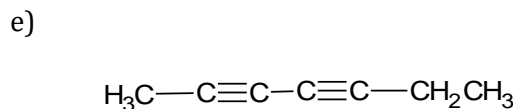
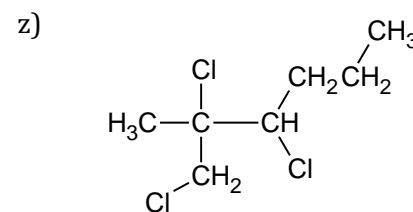
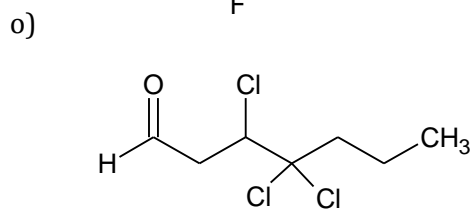
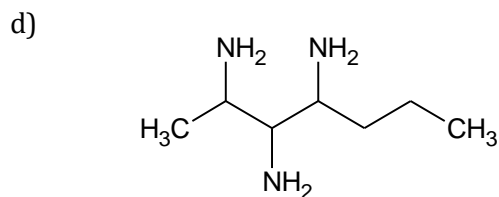
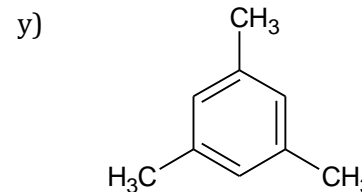
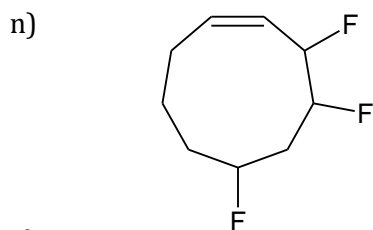
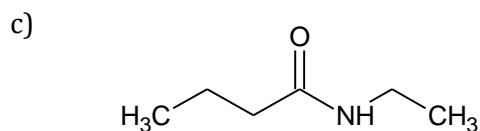
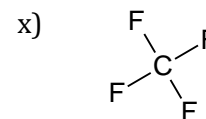
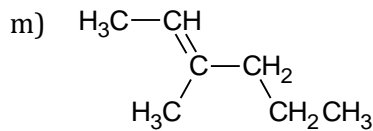
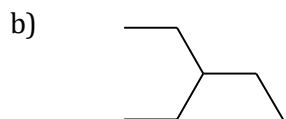
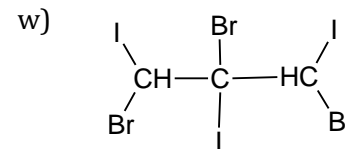
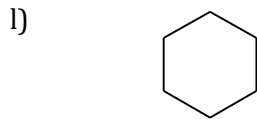
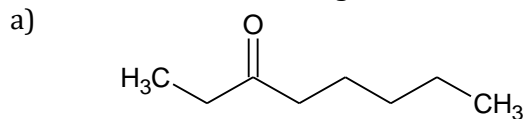
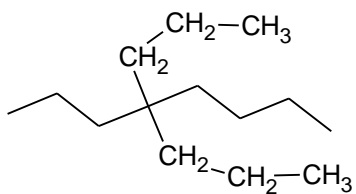


100 % ORGANIC NOMENCLATURE: ANSWERS

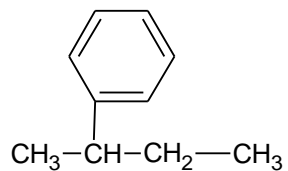
1. Given the following names, draw the corrected molecular structure.



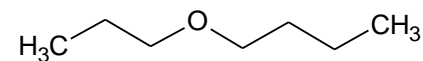
f)



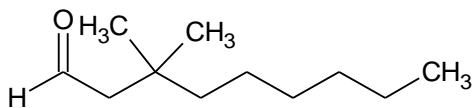
q)



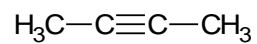
bb)



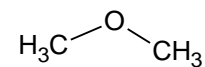
g)



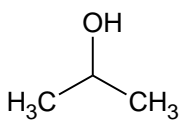
r)



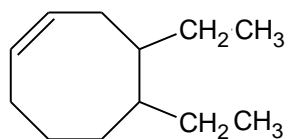
cc)



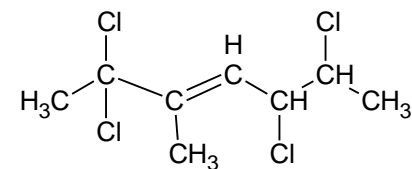
h)



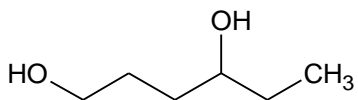
s)



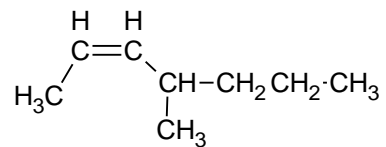
dd)



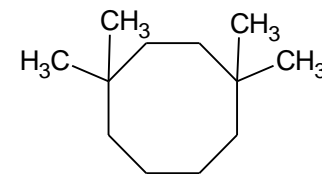
i)



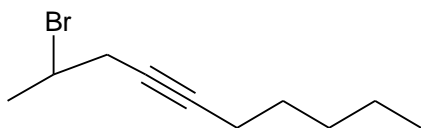
t)



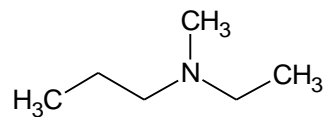
ee)



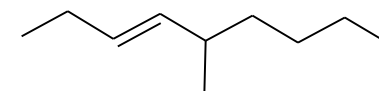
j)



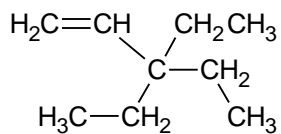
u)



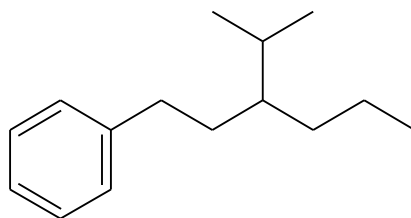
ff)



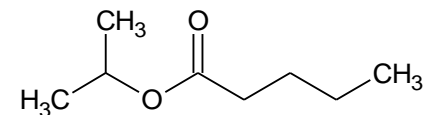
k)



v)



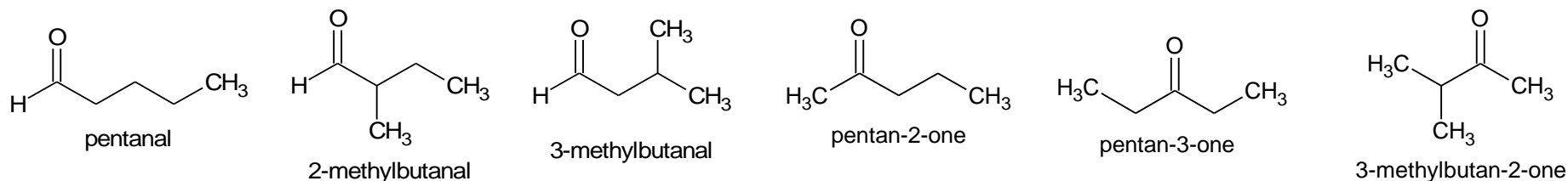
gg)



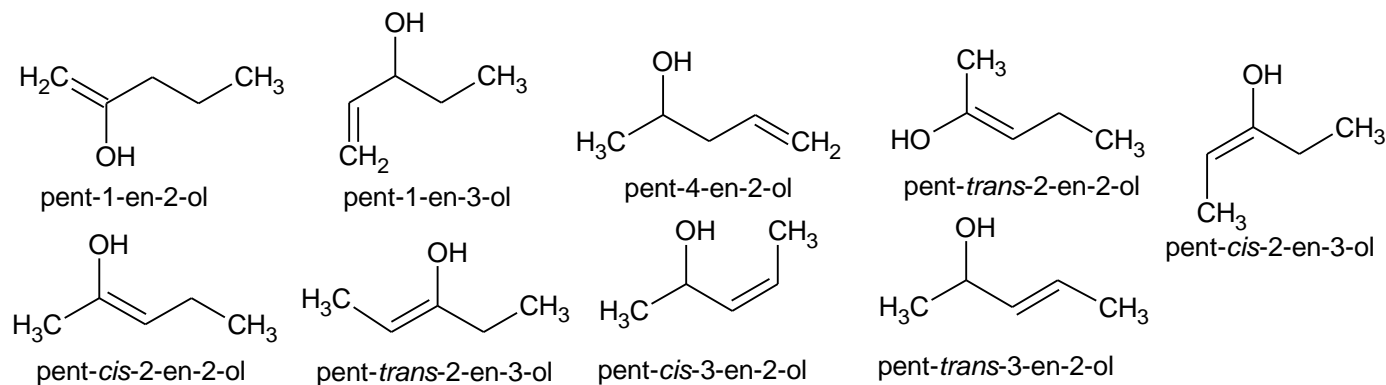
2. Draw and name for at least four isomers of an organic molecule with the formula $C_5H_{10}O$.

All molecules must be one of the following:

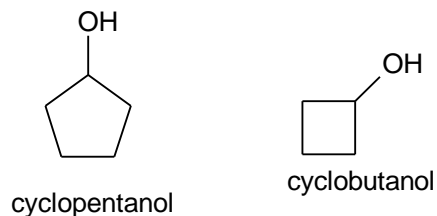
a) single carbonyl in an alkane (ketone or aldehyde).



b) single alcohol in an alkene (note the change in naming pattern for multiple functional groups).



c) single alcohol in a cycloalkane (note: rings smaller than four carbons generally don't occur and they rarely have double bonds).



3. Given the following molecular structures, provide the correct name.

- | | | |
|----------------------------------|---|---|
| a) propan-2-ol (isopropanol) | h) pentan-2-one | o) 5,5-dimethylhept- <i>trans</i> -2-ene |
| b) butylpropanoate | i) methanal (formaldehyde) | p) <i>N,N</i> -dimethylethanamine (<i>N,N</i> -dimethyl-1-aminoethane; dimethylethylamine) |
| c) <i>N</i> -methylbutanamide | j) 1-aminocyclopentane (cyclopentylamine) | q) 3,4-diiodo-2-methylhexane |
| d) decan-5-one | k) methylethanoate | r) 2-ethylheptanal |
| e) 3-ethyl-4,5-dimethyloctane | l) 4,5-dibromohexan-2-ol | s) 1-cyclohexylmethanamide (cyclohexanamide) |
| f) 2,8,8-trimethyldeca-3,6-diyne | m) phenol (or benzenol) | t) 3-ethyl-3,5,5-trimethylhexane |
| g) <i>N</i> -ethylpropanamide | n) propanal | u) ethoxypropane |

(Next page on question sheet.)

- | | | |
|--|---------------------------------|--|
| v) 3-ethyl-5,5-dimethylheptane | aa) 3,5-dimethylcyclooctan-1-ol | ff) 3-amino-4-ethylheptane |
| w) 3-ethyl-4,5-dimethylocta-1- <i>trans</i> -4-diene | bb) methoxyisopropane | gg) hexan-2,3,5-triol |
| x) 3-ethyl-5,5,6-trimethylcyclohex-1-ene | cc) isopropylcyclopentane | hh) 5-bromo-1,1-dichloro-5-methylheptane |
| y) 2-methyloctanoic acid | dd) 5-methylhept-1-yne | ii) 3-ethyl-3,8-dimethylnonane |
| z) 1,2,5-trifluoro-5-methylhexane | ee) 3,5-dimethylheptane | jj) 3,4-dimethylhexane |