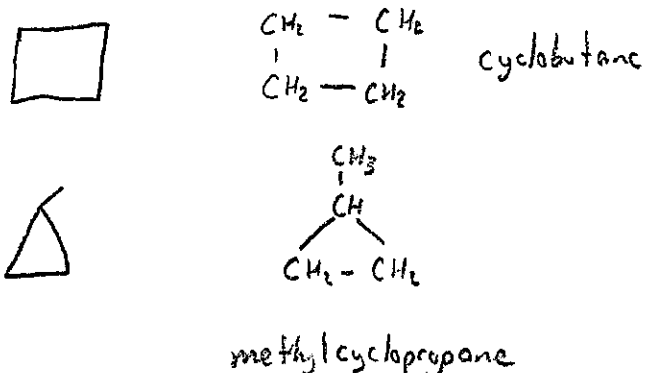
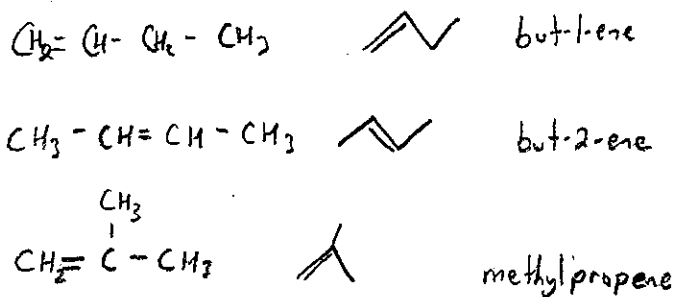


## WS - 2 Alkenes/Alkynes

key

### Structural Isomers

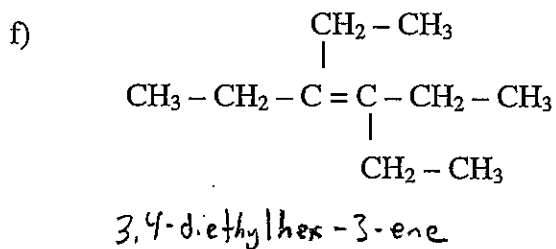
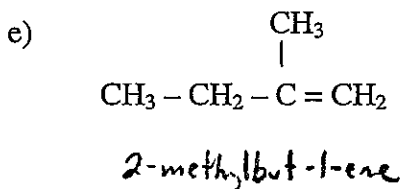
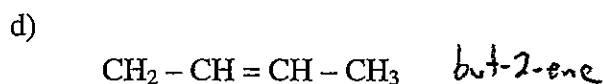
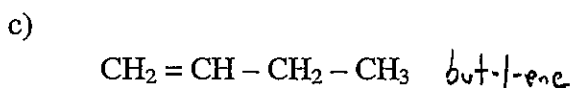
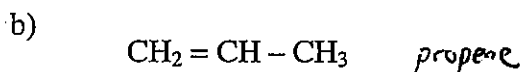
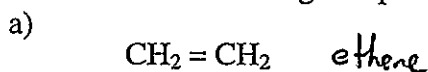
1. Build the isomers of butene,  $C_4H_8$ . Draw the condensed and line structural diagrams for each isomer.



### Alkenes

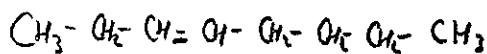
~~1. Draw and name the five possible noncyclic isomers of  $C_5H_{10}$ .~~

2. Name the following compounds:

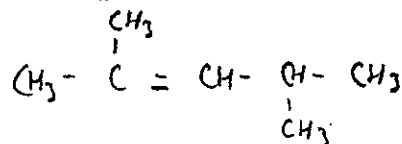


3. Draw each of the following compounds:

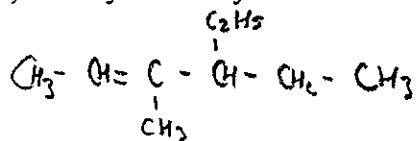
a) oct-3-ene



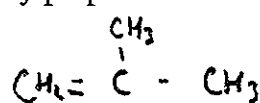
b) 2,4-dimethylpent-2-ene



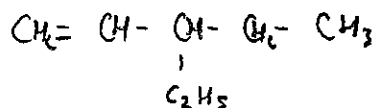
c) 4-ethyl-3-methylhex-2-ene



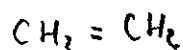
d) methylpropene



e) 3-ethylpent-1-ene



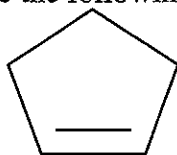
f) ethene



## Cycloalkenes

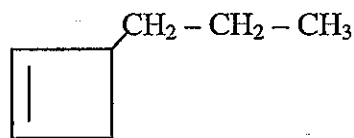
1. Name the following compounds:

a)



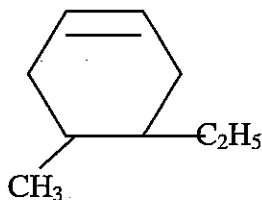
cyclopentene

b)



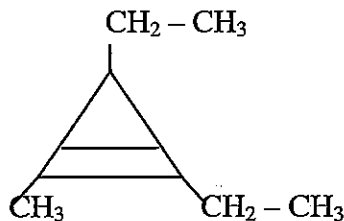
3-propylcyclobutene

c)



4-ethyl-5-methylcyclohexene

d)



1,3-diethyl-2-methylcyclopropene

2. Draw the following compounds:

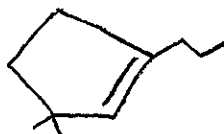
a) cyclooctene



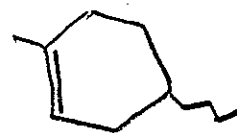
b) 1-ethyl-3-methylcyclopropene



c) 3,3-dimethyl-1-propylcyclopentene



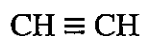
d) 4-butyl-1-methylcyclohexene



## Alkynes

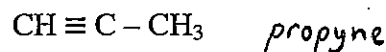
1. Name the following compounds:

a)



ethyne

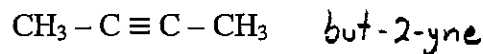
b)



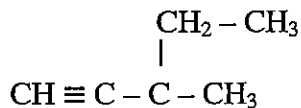
c)



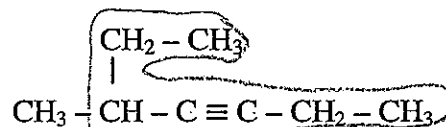
d)



e)



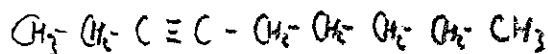
f)



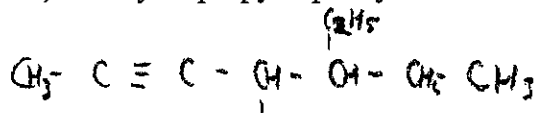
5-methylhept-3-yne

2. Draw the following compounds:

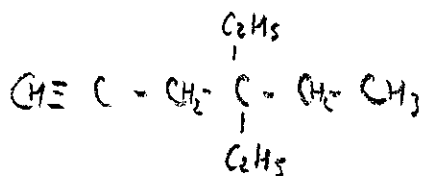
a) non-3-yne



b) 5-ethyl-4-propylhept-2-yne



c) 4,4-diethylhex-1-yne



d) 2,2,3,3-tetramethyloct-4-yne

