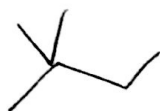


## SECTION:

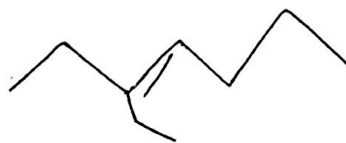
## Organic Nomenclature Practice

1. Working from the **back** of the name and moving forward, draw the skeletal structure for the following:

a. 2,2-dimethylbutane



b. 3-ethyl-3-heptene



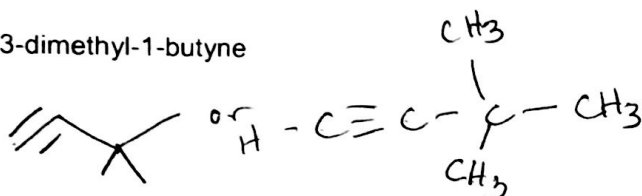
c. 3-ethyl-2-methyl-1-hexene



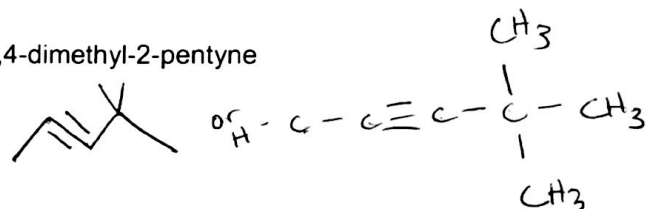
d. 4,4-difluoro-2-pentene



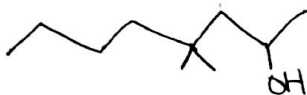
e. 3,3-dimethyl-1-butyne



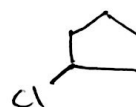
f. 4,4-dimethyl-2-pentyne



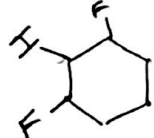
g. 4,4-dimethyl-2-octanol



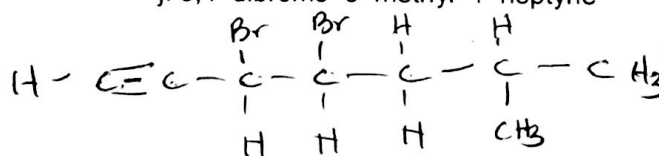
h. chlorocyclopentane



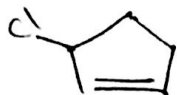
i. 1,3-difluoro-2-iodocyclohexane



j. 3,4-dibromo-6-methyl-1-heptyne



k. 3-chlorocyclopentene



l. 2,3-dichlorocyclobutene



2 main errors

- longest continuous chain
- lowest sets of numbers

2. Each of the following names is incorrect. Draw them as written and then give the correct name.

a. 2, 4, 5-trimethylhexane



Correct name: 2,3,5-trimethylhexane

b. 2-ethyl-2-propylbutane



Correct name: 3-ethyl-3-methylhexane

c. 2-ethylhexane



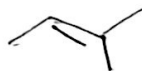
Correct name: 2-methylheptane

d. 2-ethyl-4-methyl-3-propylhexane



Correct name: 4-ethyl-3,5-dimethylheptane

e. 3-methyl-2-butene



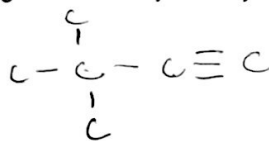
Correct name: 2-methyl-2-butene

f. 3-propanol



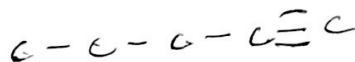
Correct name: 1-propanol

g. 2,2-dimethyl-3-butyne



Correct name: 3,3-dimethyl-1-butyne

h. 5-octyne



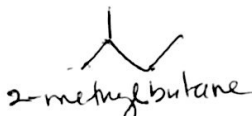
Correct name: 1-octyne

Saturated:  
as many hydrogen  
atoms as  
possible  
(no multiple  
bonds)

3. Draw carbon backbones for the 3 unique isomers of  $C_5H_{12}$  and then give the names (1<sup>st</sup>: saturated or unsaturated?)



pentane



2-methylbutane



2,2-dimethylpropane

4. Draw and name the 4 isomers of  $C_4H_8$  (1 saturated ring and 3 unsaturated chains)



1-butene



2-butene



2-methylpropene



cyclobutane