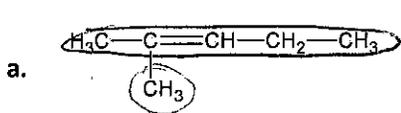


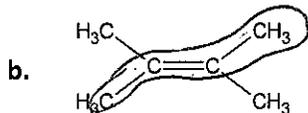


## Names and Structures of Alkenes & Alkynes

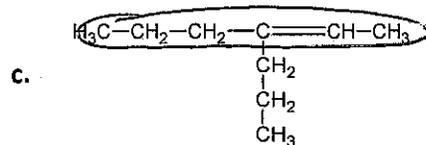
1. Name the following compounds:



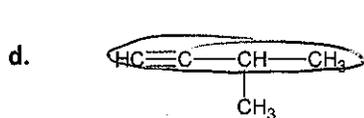
2-methyl 2-pentene



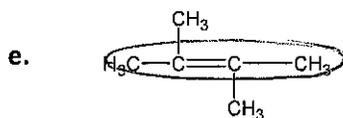
2,3-dimethyl 2-butene



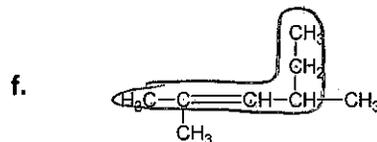
3-propyl 2-hexene



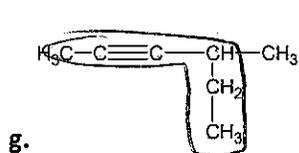
3-methyl 1-butene



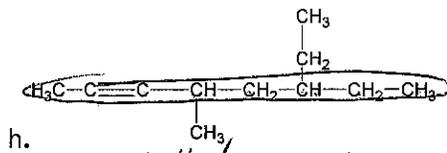
2,3-dimethyl 2-butene



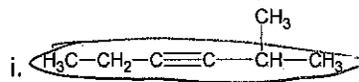
2,4-dimethyl 2-hexene



4-methyl 2-hexyne



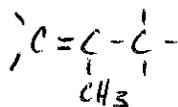
4-methyl 6-ethyl 2-octyne



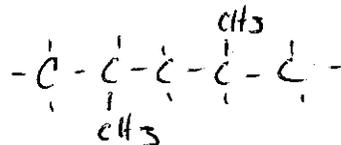
2-methyl 3-hexyne

2. Draw structural formulas for the following compounds:

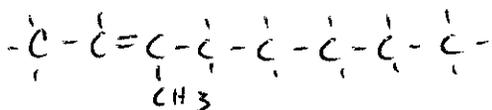
a. 2-methyl propene



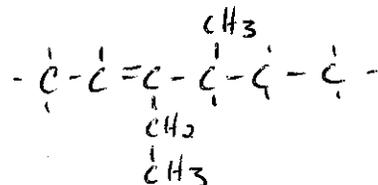
b. 2,4-dimethyl pentane



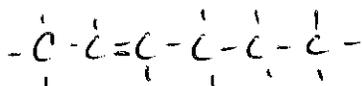
c. 3-methyl 2-octene



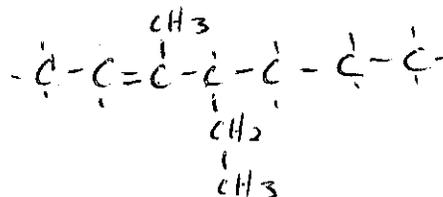
d. 3-ethyl 4-methyl 2-hexene



e. 2-hexene

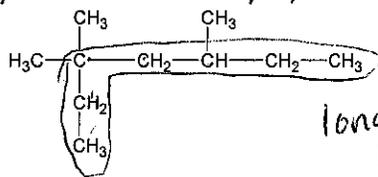


f. 4-ethyl 3-methyl 2-heptene



**Misc Questions:**

1. Why is the name 2-ethyl 2,4-dimethyl hexane unsuitable for the following compound?



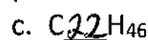
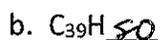
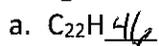
longest chain is heptane

2. What is the difference between a saturated and an unsaturated hydrocarbon?

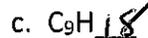
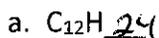
↳ single bonds

↳ double bonds

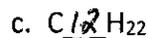
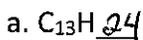
3. Use the general formula for **alkanes** to fill in the missing subscript for each of the following:



4. Use the general formula for **alkenes** to fill in the missing subscript:

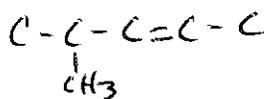


5. Fill in the missing subscript for the following **alkynes**:

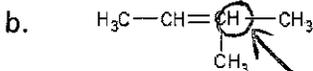


6. What is wrong with the following:

a. 2-methyl 3-pentene



numbers aren't lowest  
(double bond needs lowest #)



too many bonds (5)

c.

