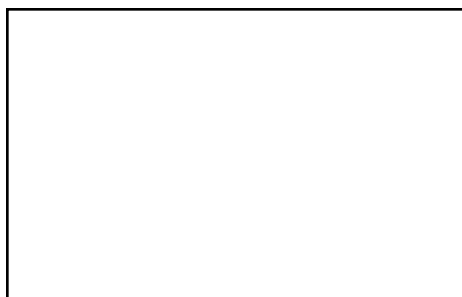


# CHEMISTRY 2210 - PRACTICE EXAM #2 - SPRING 2013 (KATZ)

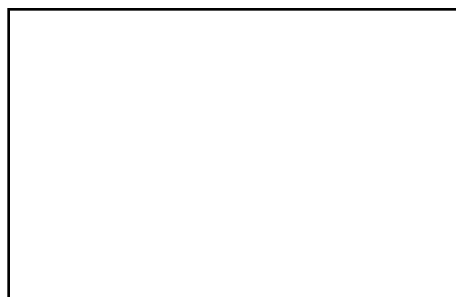
## 1. ISOMERS

- a. Draw structural formulas for three ISOMERIC compounds with the formula  $C_7H_{14}$ . One should be an ALKENE and one should be a CYCLIC ALKANE.

A)



B)

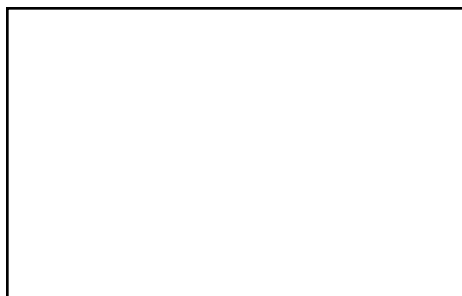


C)



- b. Draw structural formulas for three ISOMERIC ALCOHOLS with the formula  $C_6H_{14}O$ . One should be a primary, one a secondary, and one a tertiary alcohol.

A)



B)



C)

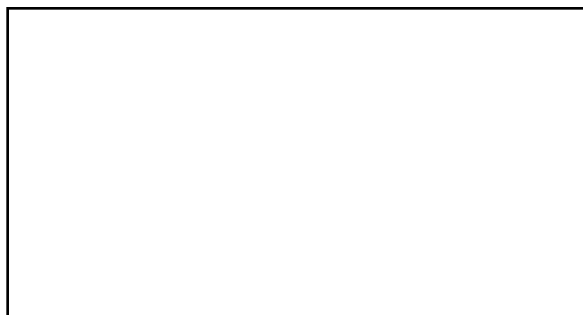


2. Draw correct structural formulas for the following compounds.

a) 3-ethyl-4-methyl-2-pentanol



b) cis-4,6-dichloro-2-heptene



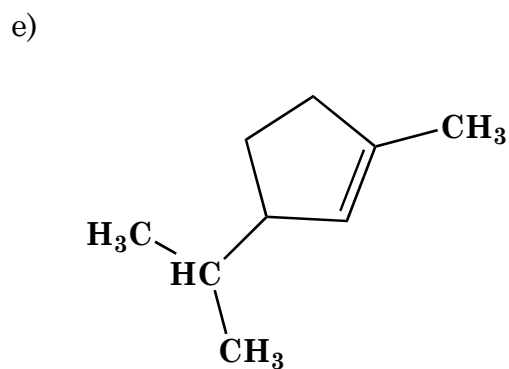
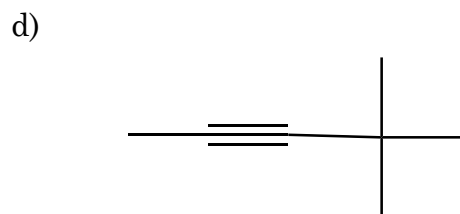
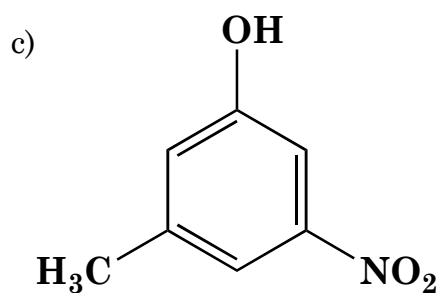
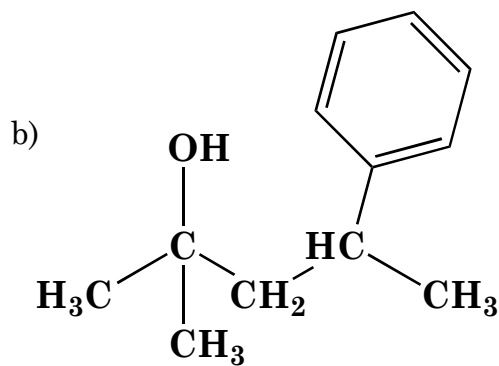
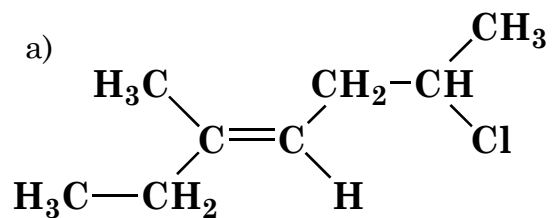
c) 4-chloro-1,2-difluoro benzene



d) 2,3-diethyl cyclohexanol



3. Give correct systematic names for the following compounds:





5. Classify the reactions in Problem #4 as addition, dehydration, substitution, or condensation by circling the correct term. You may use a term more than once.

REACTION A-    ADDITION    DEHYDRATION    SUBSTITUTION    CONDENSATION

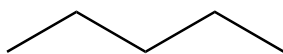
REACTION B-    ADDITION    DEHYDRATION    SUBSTITUTION    CONDENSATION

REACTION C-    ADDITION    DEHYDRATION    SUBSTITUTION    CONDENSATION

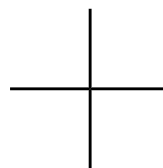
REACTION D-    ADDITION    DEHYDRATION    SUBSTITUTION    CONDENSATION

6. For each pair of compounds, circle the compound with the higher boiling point.

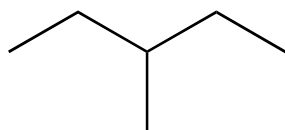
a.



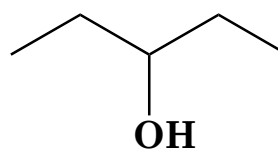
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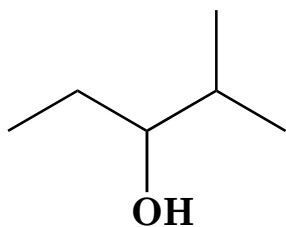
b.



or



c.



or

