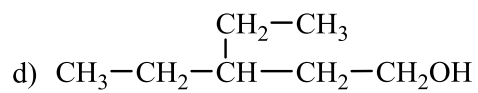
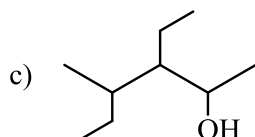
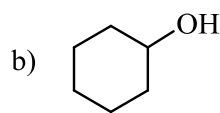
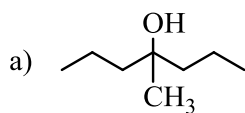


Practice 8-1

Give the IUPAC name of each of the following alcohols:

**Answer**

a) 4-methyl-4-heptanol

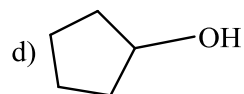
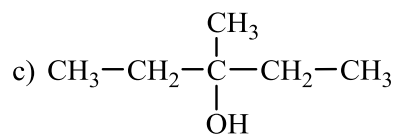
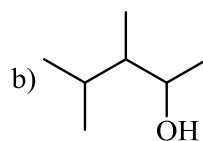
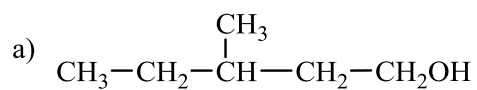
b) cyclohexanol

c) 3-ethyl-4-methyl-2-hexanol

d) 3-ethyl-1-pentanol

Practice 8-2

Classify the following alcohols as primary, secondary, or tertiary:



Answer

Locate the carbon bonded to the -OH group and then count the carbons directly attached to that carbon.

a) primary alcohol

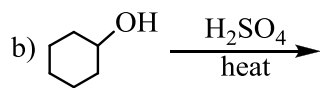
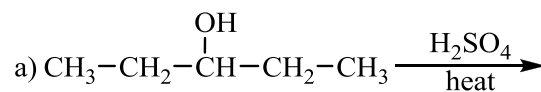
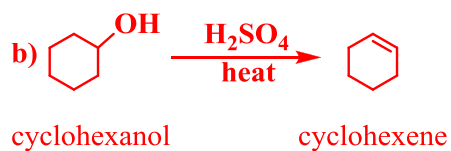
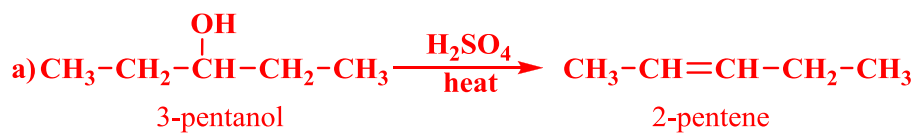
b) secondary alcohol

c) tertiary alcohol

d) secondary alcohol

Practice 8-3

Give the products for each of the following dehydration reactions. Name each reactant and product.

**Answer**

Practice 8-4

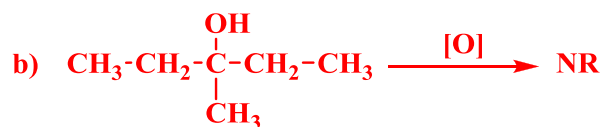
Write a chemical equation showing reactant and product for each of the following. If no reaction occurs, write "NR".

a) oxidation of 2-methyl-1-propanol

b) oxidation of 3-methyl-3-pentanol

c) oxidation of cyclobutanol

Answer



Practice 8-5

Draw structures for each of the following

a) 4-chloro-3,5-dimethylphenol

b) 2,3,5-triethylphenol

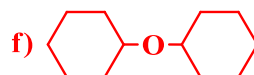
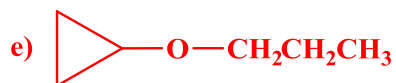
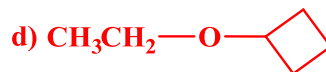
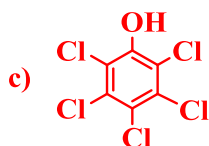
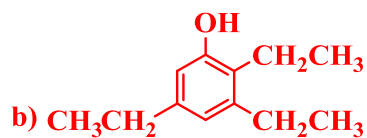
c) pentachlorophenol

d) ethyl cyclobutyl ether

e) cyclopropyl propyl ether

f) dicyclohexyl ether

Answer



Practice 8-6

Draw structures corresponding to the following names:

a) 2,2-dimethylcyclopentanone

b) 2,4,6-trimethylheptanal

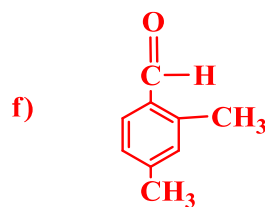
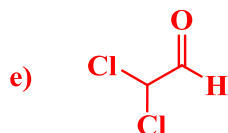
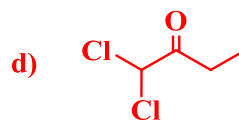
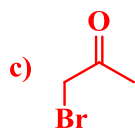
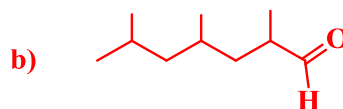
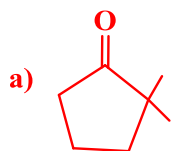
c) bromopropanone

d) dichloromethyl ethyl ketone

e) dichloroacetaldehyde

f) 2,4-dimethylbenzaldehyde

Answer



Practice 8-7

Write a chemical equation showing reactant and product for each of the following. If no reaction occurs, write "NR".

- oxidation of 5-methylhexanal
- oxidation of 3,3-dimethylpentanal
- oxidation of 3-ethylcyclohexanone

Answer

