
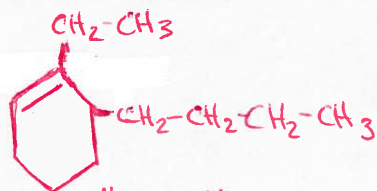


SECTION 25.11 Review Problems

Problem 13. The names of the compounds listed below are NOT correct. Using the incorrect name, draw the structural formula in the work area. Then write the correct name of each compound on the line provided.

Incorrect Name	Correct Name	Work Area
a. 4,4-dimethylhexane	<u>3,3-dimethylhexane</u>	
b. 2-n -propylpentane	<u>4-methylheptane</u>	
c. 1,1-diethylbutane	<u>3-ethylhexane</u>	
d. 1,4-dimethylcyclobutane	<u>1,2-dimethylcyclobutane</u>	
e. 3-methyl-2-butene	<u>2-methyl-2-butene</u>	
f. 5-ethylcyclopentene	<u>3-ethylcyclopentene</u>	
g. 2-n -propyl-1-propene	<u>2-methyl-1-pentene</u>	
h. 2-isopropyl-3-heptene	<u>2,3-dimethyl-4-octene</u>	
i. 2,2-dimethyl-3-butyne	<u>3,3-dimethyl-1-butyne</u>	
j. 5-octyne	<u>3-octyne</u>	

Problem 14. Write condensed structural formulas for the following:

- | Name | Condensed Structural Formula |
|-----------------------------------|---|
| a. 4-isopropyloctane | $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_3 \\ \\ \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \end{array}$ |
| b. 3,4-dimethyl-4-propylheptane | $\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \\ \quad \\ \text{CH}_3 - \text{CH}_2 - \text{CH} - \text{C} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \end{array}$ |
| c. 1,1-dimethylcyclobutane |  |
| d. 3-ethyl-3-heptene | $\begin{array}{c} \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_3 - \text{CH}_2 - \text{C} = \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \end{array}$ |
| e. 3-ethyl-2-methyl-1-hexene | $\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_2 = \text{C} - \text{C} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_2 - \text{CH}_3 \end{array}$ |
| f. 3-octene | $\text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$ |
| g. 3,3-dimethyl-1-butyne | $\begin{array}{c} \text{CH}_3 \\ \\ \text{CH} \equiv \text{C} - \text{C} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$ |
| h. 4,4-dimethyl-2-pentyne | $\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3 - \text{C} \equiv \text{C} - \text{C} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$ |
| i. 3-n-butyl-2-ethylcyclohexene |  |
| j. 3,4-diethyl-4,6-dimethylnonane | $\begin{array}{c} \text{CH}_2 - \text{CH}_3 \quad \text{CH}_3 \quad \text{CH}_3 \\ \quad \quad \\ \text{CH}_3 - \text{CH}_2 - \text{CH} - \text{C} - \text{CH}_2 - \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_2 - \text{CH}_3 \end{array}$ |