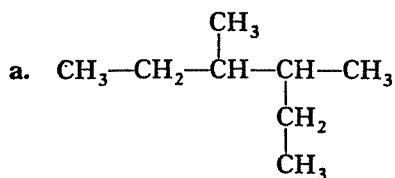
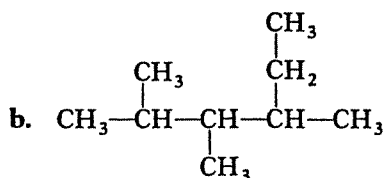


Organic Chemistry

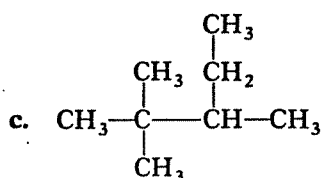
1. Find the longest carbon chain in each formula and number the carbons. Use your rules to name these hydrocarbons.



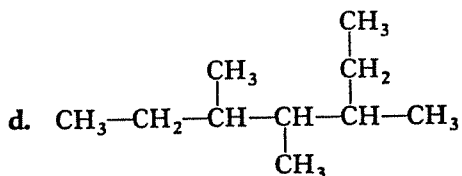
a)



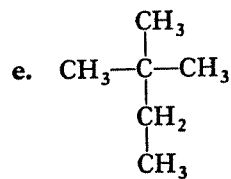
b)



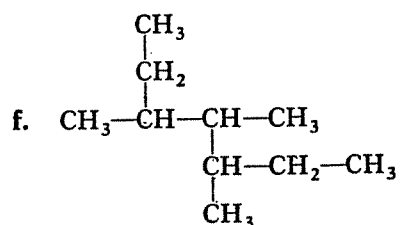
c)



d)

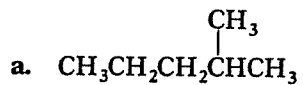


e)

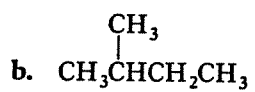


f)

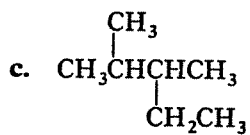
2. Name the following organic compounds:



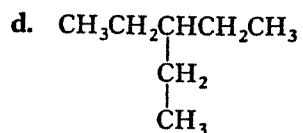
a)



b)



c)



d)

3. Sketch the following:

a) 2-methyloctane

b) 4-ethyloctane

c) 2,3-dimethyloctane

d) 4-propylnonane

e) 2,3,4,5-tetramethylhexane

f) 4,6-diethyl-5-propylnonane

4. Listed below are the condensed structural formulas or names of the nine isomers of heptane, C_7H_{16} . Write either the formula or name for each.

a. $CH_3CH_2CH_2CH_2CH_2CH_2CH_3$

b.
$$\begin{array}{c} CH_3 \quad CH_3 \\ | \quad | \\ CH_3CHCH_2CHCH_3 \end{array}$$

c.
$$\begin{array}{c} CH_3 \quad CH_3 \\ | \quad | \\ CH_3C-CHCH_3 \\ | \\ CH_3 \end{array}$$

d. 2,3-dimethylpentane

e. 3,3-dimethylpentane

f.
$$\begin{array}{c} CH_3 \\ | \\ CH_3CH_2CHCH_2CH_2CH_3 \end{array}$$

g.
$$\begin{array}{c} CH_3 \\ | \\ CH_3CCH_2CH_2CH_3 \\ | \\ CH_3 \end{array}$$

h. 2-methylhexane

i. 3-ethylpentane

5. Sketch the following.

a) 1-hexyne

b) 3-heptene