

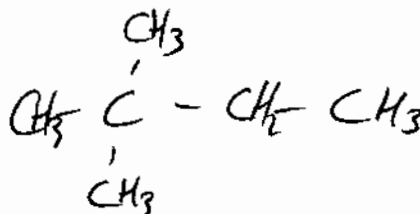
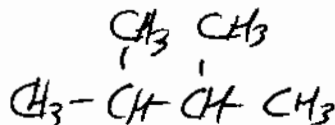
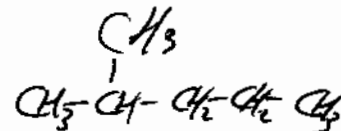
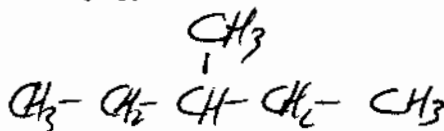
Name

RAPP

Study Guide I: Alkanes, Cycloalkanes, Alkyl Halides, Isomers, Lewis Structures

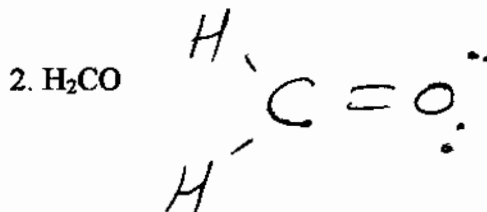
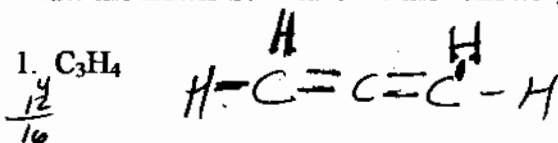
Isomers

Draw all the possible structural isomers of C₆H₁₄.



Lewis Structures

Draw the Lewis Structure for the following:

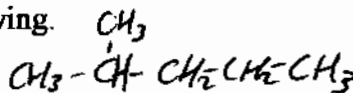


Nomenclature

Write structural formulas for each of the following.

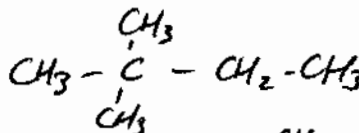
1. 2-methylpentane

①



2. 2,2-dimethylbutane

②



3. 4-ethyl-2,2-dimethylhexane

4. 3-bromo-2-methylpentane

5. 1,1-dichlorocyclopropane

6. 2-iodopropane

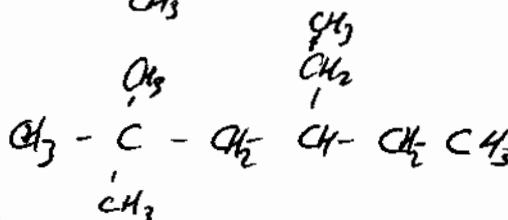
7. 1,1,4-trimethylcyclohexane

③

8. 1,1,3,3-tetrachloropropane

9. isopentylcyclohexane

10. 4-isopropyloctane



For each of the following, write a structural formula and give the proper IUPAC name for the substance. If the name is correct, write "correct".

11. 1-methylbutane

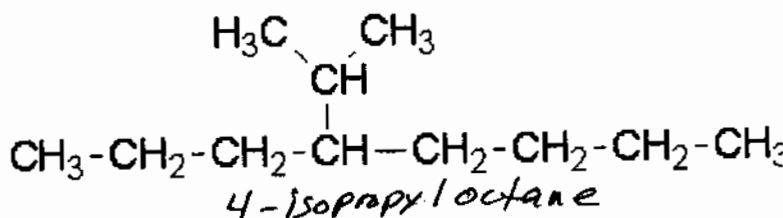
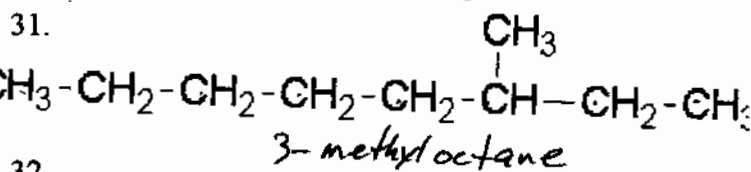
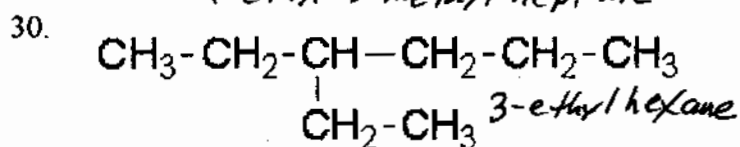
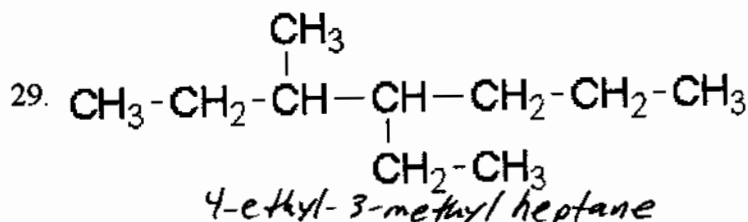
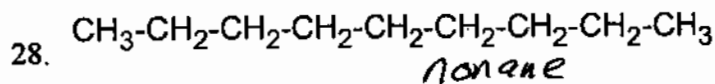
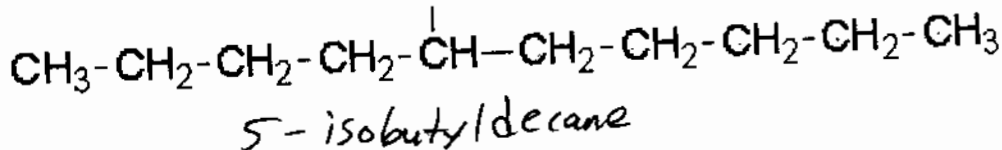
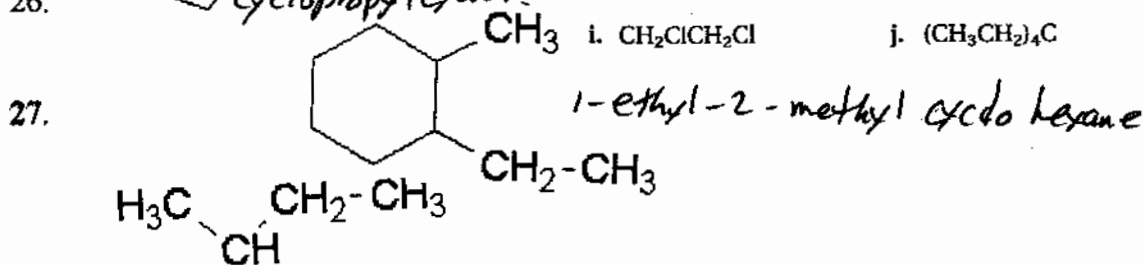
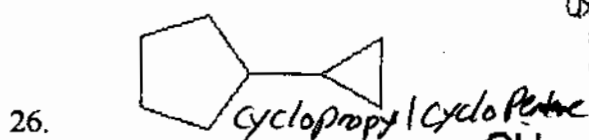
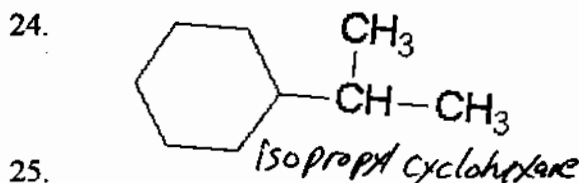
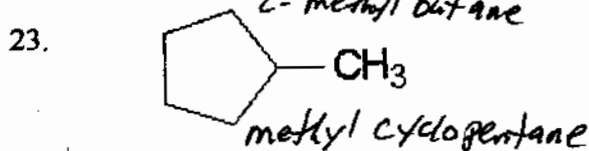
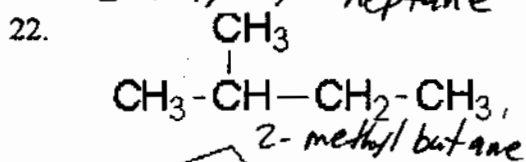
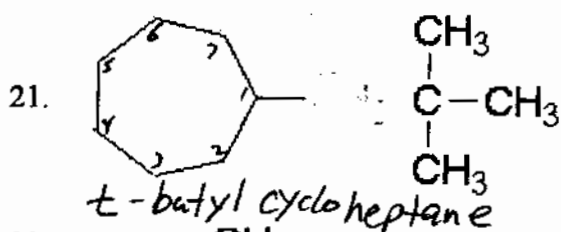
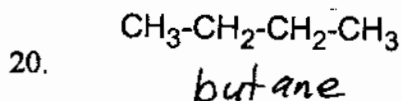
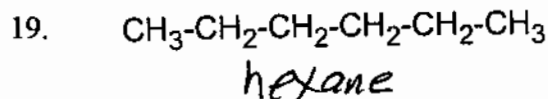
12. 2-ethylbutane

13. 2,3-dibromopropane

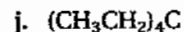
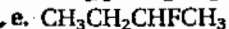
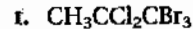
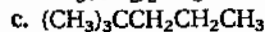
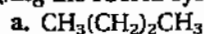
14. 1,3-dimethylcyclopropane

15. 4-chloro-3-methylbutane
16. 1,1,3-trimethylpentane
17. 4-bromo-1-methylcyclohexane
18. 4-chloro-2-iodopentane

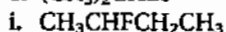
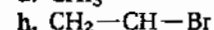
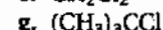
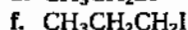
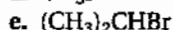
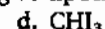
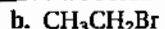
Name the following, using IUPAC nomenclature rules.



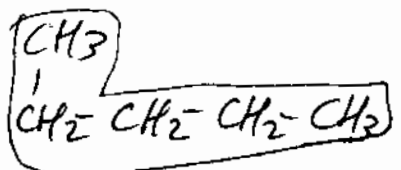
2.27. Write expanded formulas for the following compounds, and name using the IUPAC system:



2.28. Give ~~the~~ IUPAC names for the following compounds:

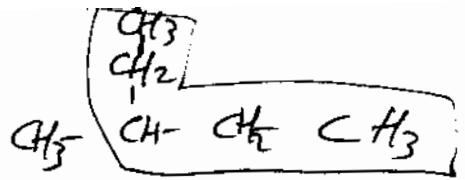


11



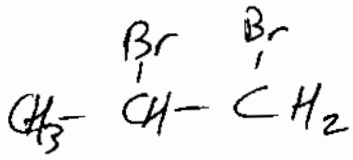
pentane

12



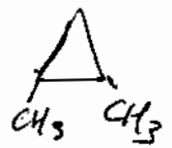
3-methyl pentane

13



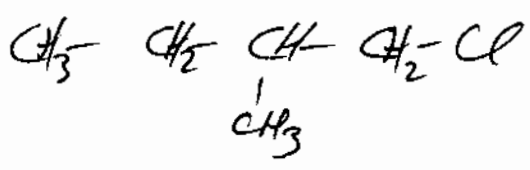
1,2-dibromo propane

14



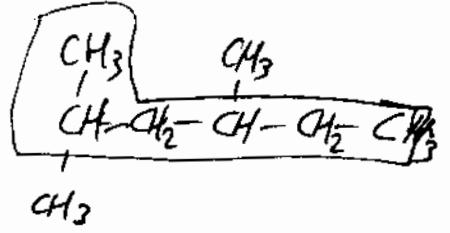
1,2-dimethyl cyclopropane

15



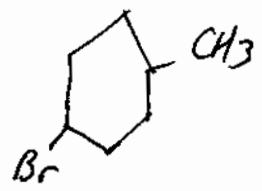
1-chloro-2-methyl butane

16



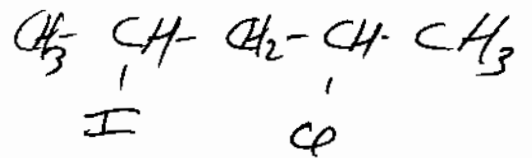
2,4-dimethyl hexane

17



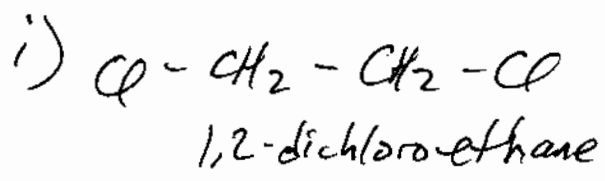
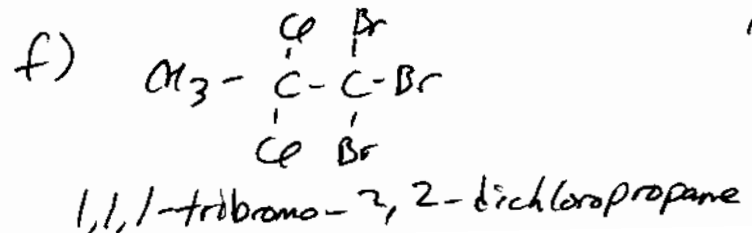
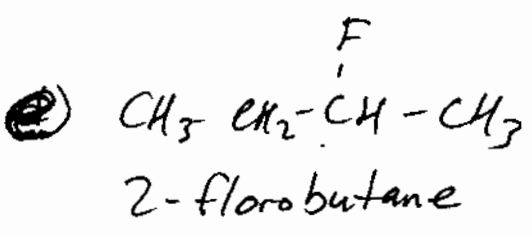
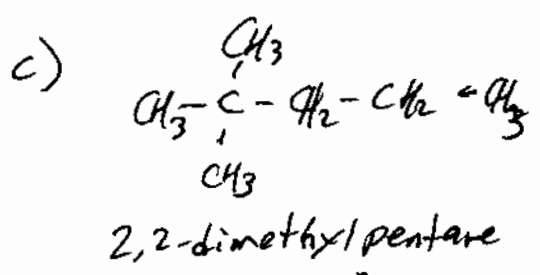
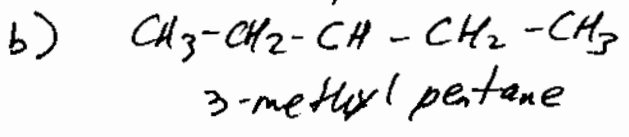
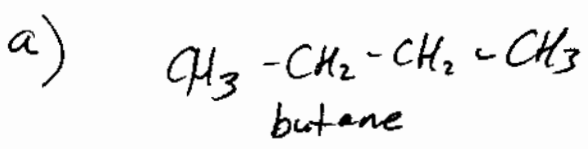
1-bromo-4-methyl cyclohexane

18

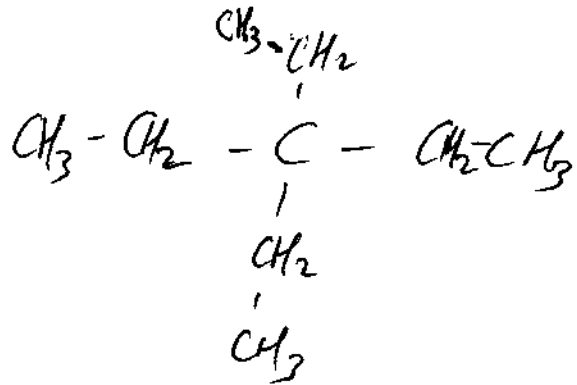


2-chloro-4-iodopentane

2.27



j)



3,3-diethylpentane

2.28

- a) 1-fluoromethane (or fluoromethane)
b) 1-bromoethane (or bromoethane)
c) 1,1-dichloromethane (or dichloromethane)
d) triiodomethane
(or 1,1,1-triiodomethane)
e) 2-bromopropane
f) 1-iodopropane
g) $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3-\text{C}-\text{Cl} \\ | \\ \text{CH}_3 \end{array}$ 2-chloro-2-methylpropane
h) bromocyclobutane
i) 2-fluorobutane