

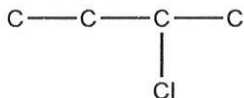
Exercise # 5A: IUPAC vs Common Names

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(see also: Supplement #4: Common Names in Organic Chemistry Nomenclature)

Provide the common & IUPAC names for compounds I-IV below:

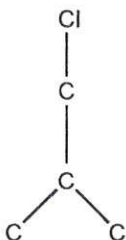
I



IUPAC

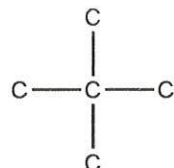
2-chlorobutane

II



1-chloro-2-methyl
→ propane

III



2-chloro-2-methylpropane

COMMON

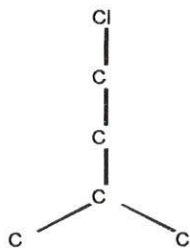
sec-chlorobutane or
sec-butyl chloride

isobutyl chlor. de

t-butyl chlor. de

IV

V

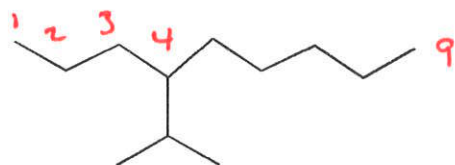


1-chloro-3-methylbutane
isopentyl chloride

(IUPAC)

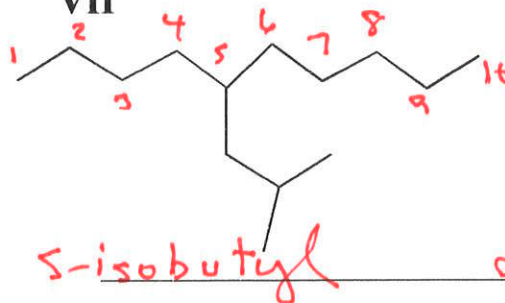
Provide ~~IUPAC~~ AND COMMON Names for compounds V-VIII below

VI

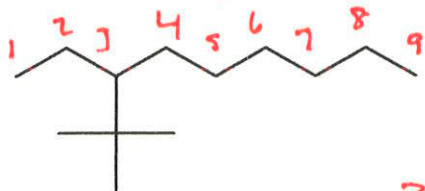


4-isopropyl nonane

VII



5-isobutyl decane

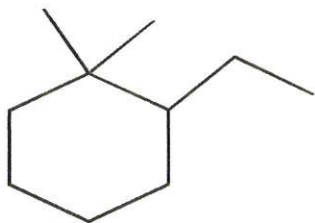


VIII

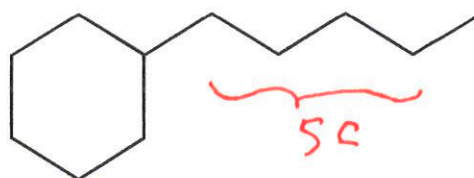
3-tertbutyl nonane

Exercise # 5B: Naming Cycloalkanes C_nH_{2n} Paraffin Rings*
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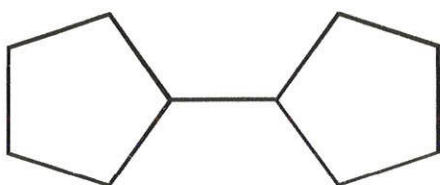
Use IUPAC rules to name these cycloalkanes



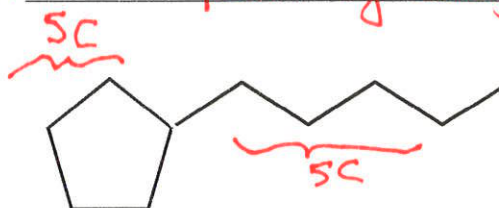
2-ethyl-1,1-dimethylcyclohexane



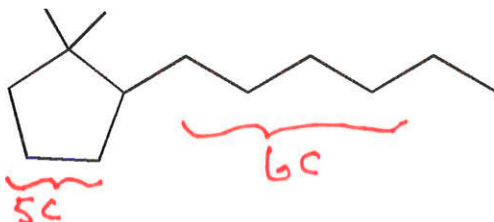
pentylcyclohexane



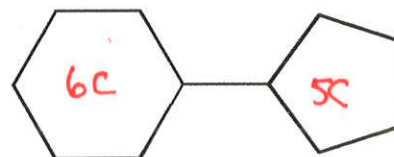
cyclopentylcyclohexane



pentylcyclopentane



1-(2,2-dimethylcyclopentyl)hexane



cyclopentylcyclohexane

*not to be confused with aromatic rings : ex.



BENZENE, C_6H_6



CYCLOHEXANE, C_6H_{12}