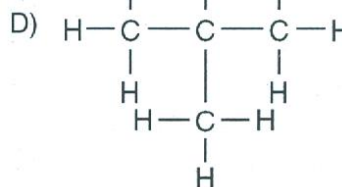
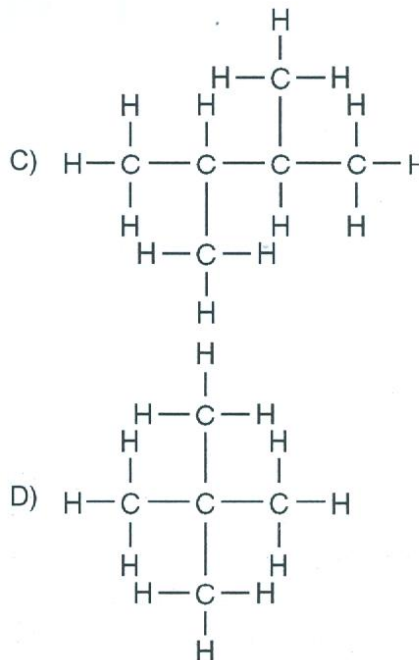
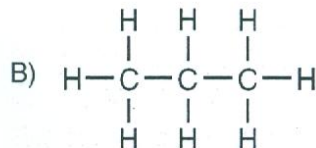
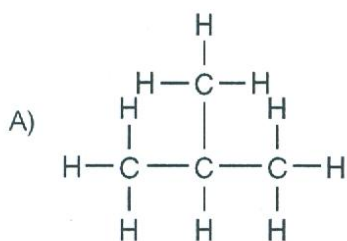


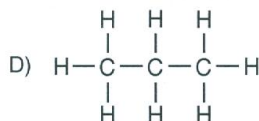
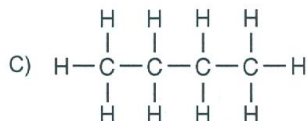
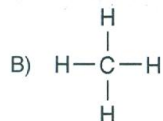
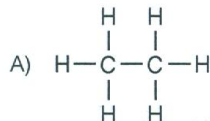
IUPAC Rules for Naming Hydrocarbons

- 1) Identify the longest continuous chain of carbon atoms & name it.
- 2) Identify the attachments & name them.
 CH_3 = methyl, C_2H_5 = ethyl, C_3H_7 = propyl, etc...
- 3) Indicate how many of each attachment is present using
 di=2, tri=3, tetra=4, etc...
- 4) Indicate where the attachments are located along the carbon chain by choosing the lowest numbers possible.
- 5) Put it altogether.

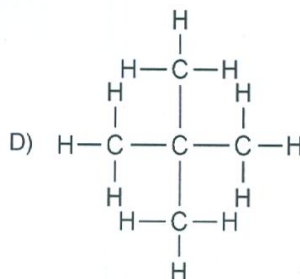
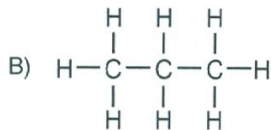
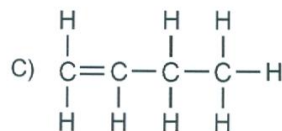
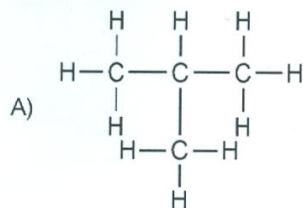
- 1) Which alkane has isomers?
 A) ethane B) methane C) propane D) butane
- 2) If two compounds are isomers, they *must* have the same
 A) percent composition C) boiling point
 B) vapor pressure D) structure
- 3) Two substances have different physical and chemical properties. Both substances have molecules that contain two carbon atoms, one oxygen atom, and six hydrogen atoms. These two substances must be
 A) isotopes of each other C) the same hydrocarbon
 B) isomers of each other D) the same compound
- 4) Which structural formula represents 2,2-dimethyl propane?



- 5) Molecules of 2-methyl butane and 2,2-dimethyl propane have different
- A) numbers of covalent bonds
B) structural formulas
C) numbers of carbon atoms
D) molecular formulas
- 6) The isomers butane and methylpropane differ in their
- A) total number of bonds per molecule
B) molecular formulas
C) structural formulas
D) total number of atoms per molecule
- 7) Which compound is an isomer of pentane?
- A) propane
B) butane
C) methyl propane
D) methyl butane
- 8) Which compound has an isomer?



- 9) Which formula is an isomer of butane?



- 10) Which structural formula represents a molecule that is *not* an isomer of pentane?

