

- 1 (a) Re-write the following sentence so that it is correct. [2]

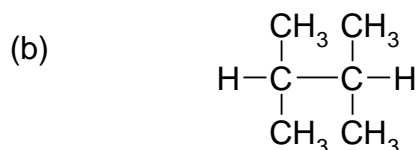
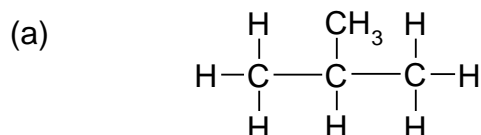
Isomers are hydrocarbons that have the same chemical formula but different displayed formulae.

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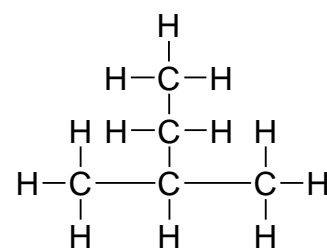
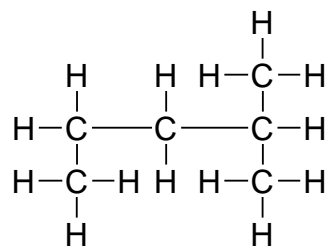
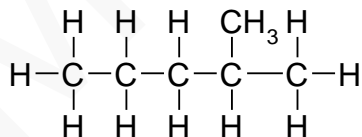
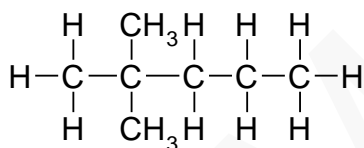
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- (b) Draw the displayed formulae of **two** isomers that have the molecular formula C₆H₁₂. [2]

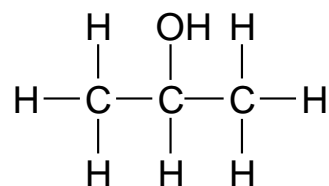
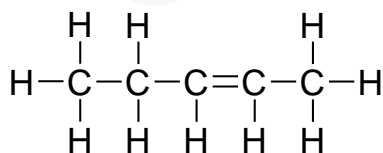
- 2 Draw one isomer of each of the following compounds [2]



- 3 Circle the two compounds that are identical: [1]



- 4 Draw one isomer of each of the following compounds [2]



5 Draw all isomers of C_4H_8 that are alkenes

[3]

6 State whether each of the following are true or false.

[8]

(a) Alkenes and alkanes contain the same functional group TRUE FALSE

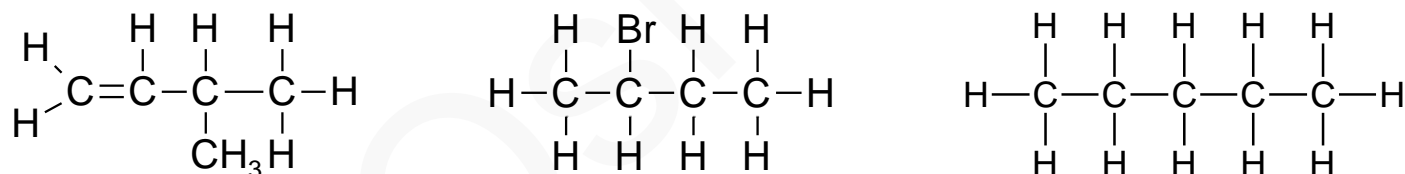
(b) The general formula of the alkenes homologous series is C_nH_{2n} TRUE FALSE

(c) All isomers with the formula C_6H_{14} are saturated TRUE FALSE

(d) The members of an homologous series all have the same molecular formula

TRUE FALSE

(e) The molecules below all contain the same functional group



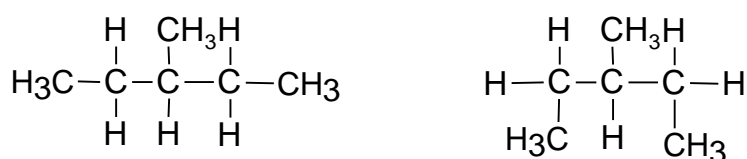
TRUE FALSE

(f) There are five isomers of C_5H_{12} TRUE FALSE

(g) It is only possible to draw one displayed formula for C_3H_8 – there are no other isomers

TRUE FALSE

(h) The molecules below are isomers of each other



TRUE FALSE