

ORGANIC CHEMISTRY Questions 3

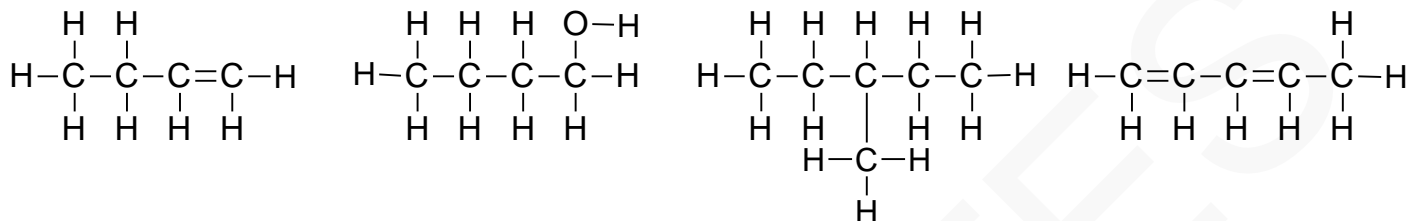
1 The alkenes are a homologous series of **unsaturated** hydrocarbons.

(a) What is meant by the term **unsaturated**? [1]

.....

.....

(b) Circle the unsaturated compounds below [2]



2 There are two compounds that have the molecular formula C₃H₆.

(a) Draw the displayed formula and give the name of an alkene with this molecular formula [2]

Displayed formula:

Name:

(b) Draw the displayed formula of another compound with this molecular formula. [1]

3 Butane and butene may be distinguished by a chemical test. Describe the test and give details of the result with each compound. [3]

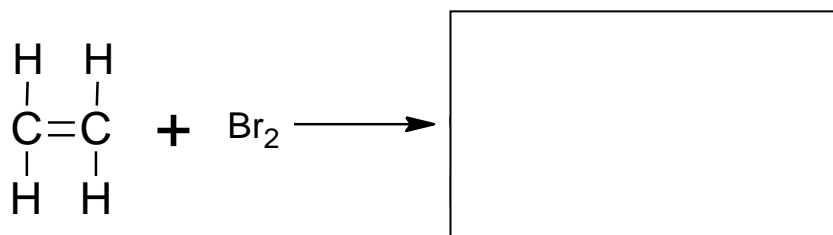
Test

Result with butane

Result with butene

4 Alkenes react with bromine.

(a) Complete the equation by drawing the displayed formula of the product. [1]



(b) Put a cross in a box to indicate the type of reaction that occurs in (a) [1]

Substitution

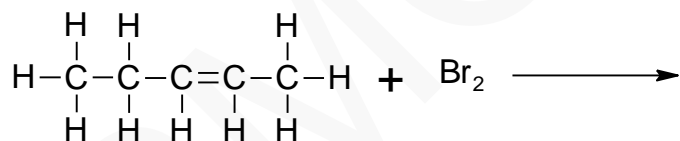
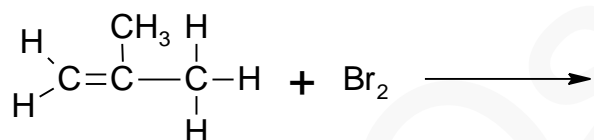
Oxidation

Displacement

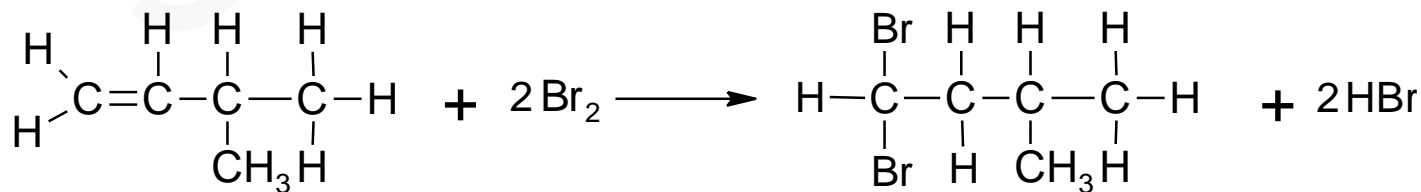
Addition

(c) Name the product of the reaction in (a) [1]

5 Complete the following equations [2]



6 The following equation is incorrect. Re-write it so that it is correct. [2]



SMOsNOTES