

## Question One

Complete the table below

Name	Structure
	$  \begin{array}{ccccccccc}  & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} \\  &   & &   & &   & &   & &   \\  \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & = & \text{C} & - \text{H} \\  &   & &   & &   & & & & & \\  & \text{H} & & \text{H} & & \text{H} & & & & &   \end{array}  $
2-methylbut-1-ene	
	$  \begin{array}{ccccccccccc}  & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{CH}_3 & & \text{H} \\  &   & &   & &   & &   & &   & &   & &   \\  \text{H} & - \text{C} & = & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & = & \text{C} & - & \text{C} & - \text{H} \\  & & & & &   & &   & & & & & &   \\  & & & & & \text{H} & & \text{H} & & & & & & \text{H} \\  & & & & & & & & & & & & & &   \end{array}  $
Pent-1-yne	
	$  \begin{array}{ccccccc}  & & & \text{H} & & & \\  & & &   & & & \\  \text{H} & - & \text{C} & - & \text{C} & \equiv & \text{C} & - \text{H} \\  & &   & & & & & \\  & & \text{CH}_3 & & & & &   \end{array}  $

## Question Three

Which of the molecule above are structural isomer of each other? Justify your answers.

### Question Two

Discuss why none of molecules above can exist as geometric isomers.

### Question Three

Draw a structural isomer of 2-methylbut-1-ene that can exist as geometric isomer.