

**1 a** Draw the structure of each of these alkenes and then state which exist as *E*-*Z* stereoisomers.

name	1-bromopropene	2-methylbut-2-ene	but-2-ene
structure			
E-Z stereoisomers?			

**b** Explain why some alkenes exist as *E-Z* stereoisomers.

- **c** Draw *E*-3-fluoropent-2-ene.
- **2** a Write an equation for the formation of the main product from the reaction of but-1-ene with hydrogen bromide.
  - **b** Name and outline the mechanism for this reaction.

c Give the structure of the other product formed and explain why more of the product shown in **a**/**b** is formed.