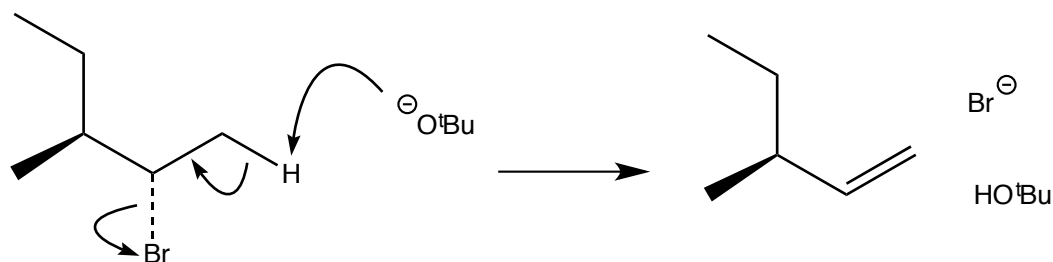


Explain why compound **C** is the minor product of this reaction.

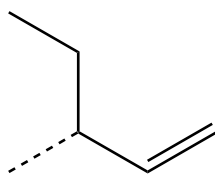
**Marks**  
**4**

**C has the new C=C bond with fewer substituents. This is an example of Zaitsev's rule: the more substituted alkene is more thermodynamically stable.**

Propose a mechanism for the formation of **C** from **D** under the conditions shown. Use curly arrows and draw the structures of any intermediates.



Compound **C** is the major product formed from **D** under these conditions. What would be the major product if the enantiomer of **D** were exposed to the same reaction conditions?



**THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.**