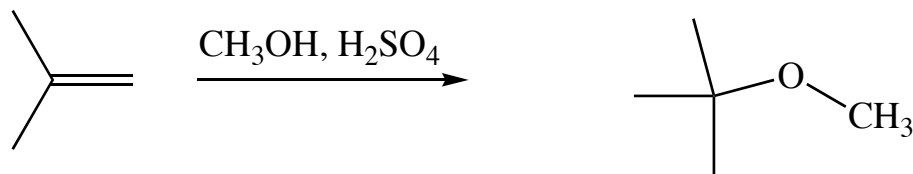
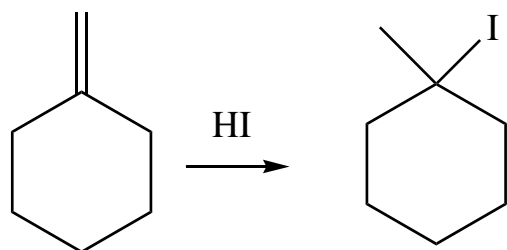
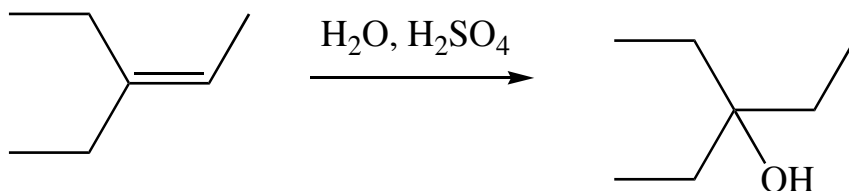


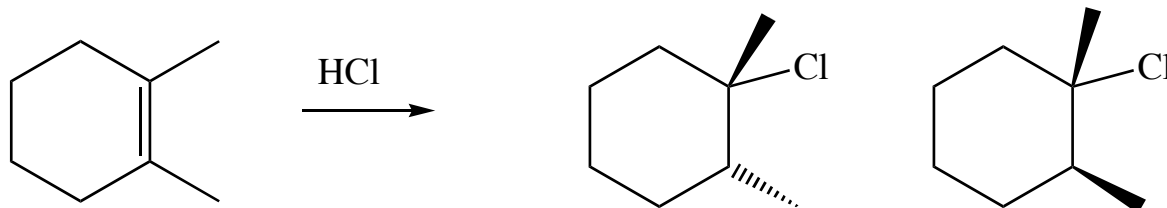
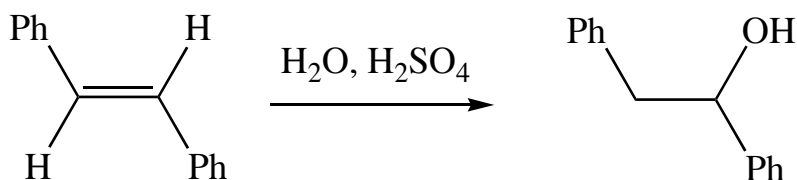
Exercise 73 - Electrophilic addition and Markovnikov's Rule

Question

Predict the product of the following reactions. Watch for stereochemical implications. Doing the mechanisms would be good practice, too.

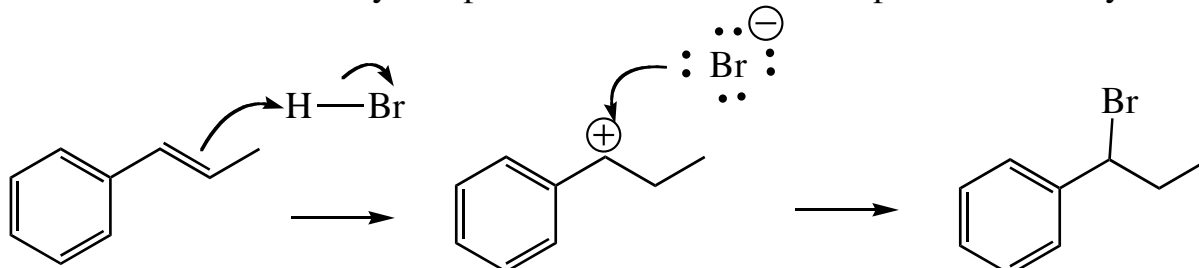


THIS is MTBE - an antiknock gasoline additive.



Question

Application of Markovnikov's Rule to the following reaction suggests that a mixture is obtained, but in fact, only one product is observed. What product and why it only?



The process shown involves the formation of a more stable secondary benzylic carbocation intermediate. The alternative is a secondary carbocation.