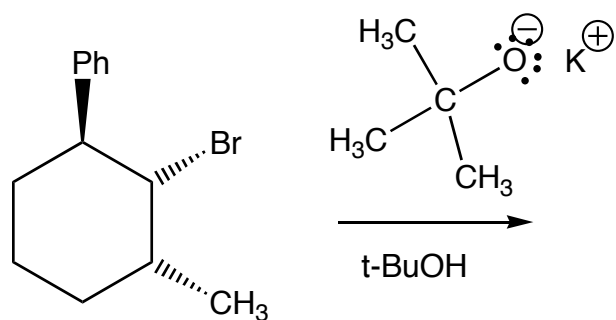
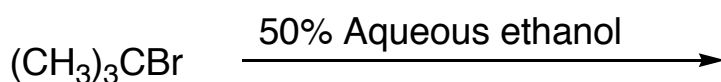
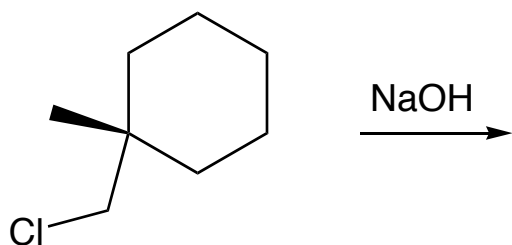
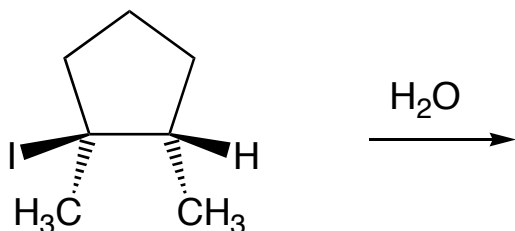
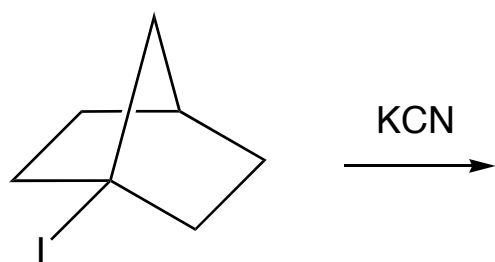
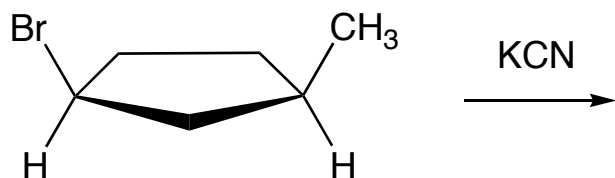
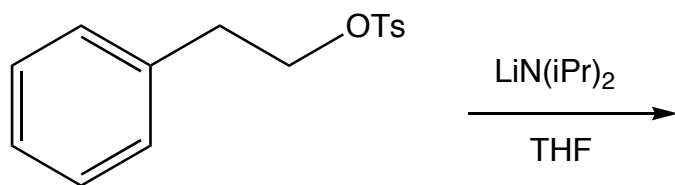
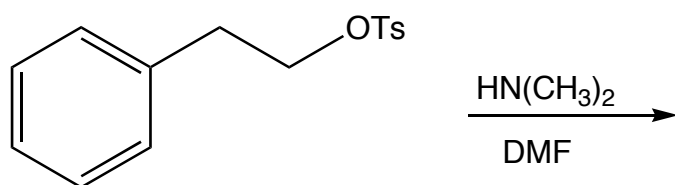


Exercise 66 - Elimination/substitution

Question One

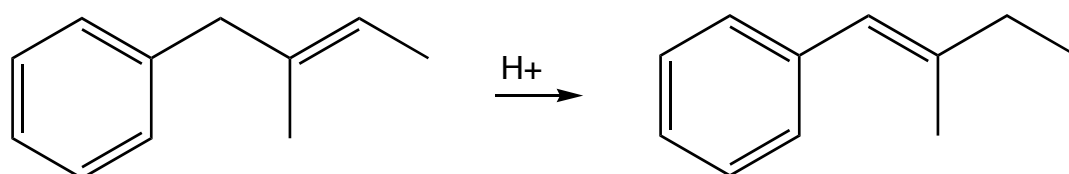
For each of the following reactions, give the expected product including the correct stereochemistry. If a mixture of products is formed, then show all products. Where possible indicate which are the major product(s). In addition, indicate what mechanisms are operating (SN1, SN2, E1, E2 etc.). If no reaction occurs, then state a reason why this is the case.





Question Two

Provide a mechanism for the following reaction and rationalize why it occurs.



Question Three

The carbon-deuterium bond is stronger than the regular C-H bond. In the two reactions shown, the alcohol product is formed at the same rate in each, while the alkene product is formed more slowly in the second reaction. Explain.

