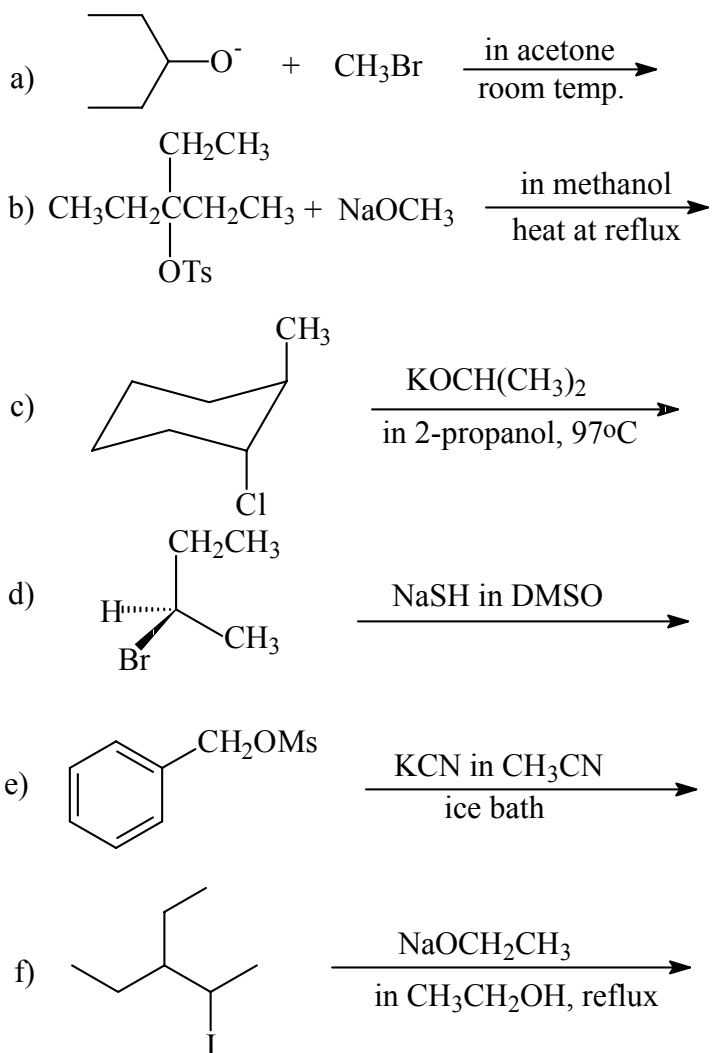


1.(24) The following reactions either proceed through an E2 or an S<sub>N</sub>2 mechanism. Give the major product of the following bimolecular reactions.



2.(12) The compound **cis 1-chloro-3-methylcyclohexane** undergoes an E2 reaction about 1/1000 as fast as the corresponding trans isomer. *Both isomers give the same two products.* Using *well-drawn* conformations (hint) of the two compounds, explain the difference in reaction rate and draw the 2 products.