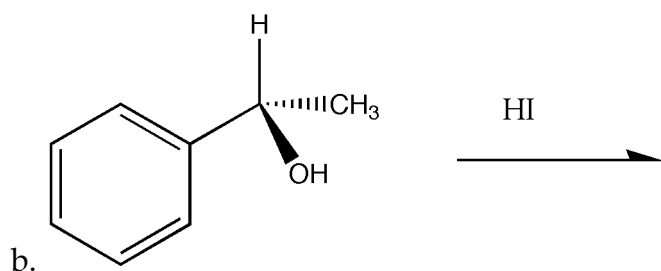
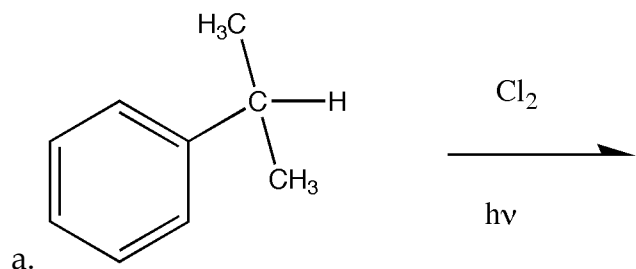


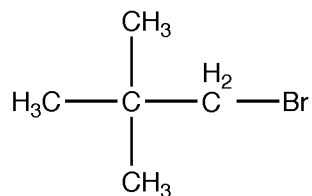
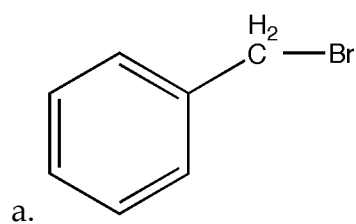
Exercise 4: Substitution reactions

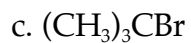
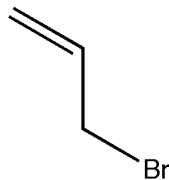
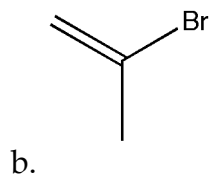
1. Predict the major product(s) for the following:



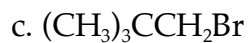
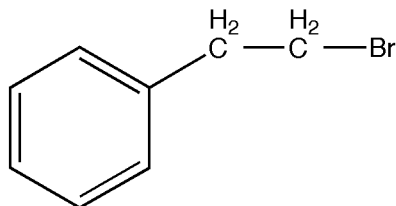
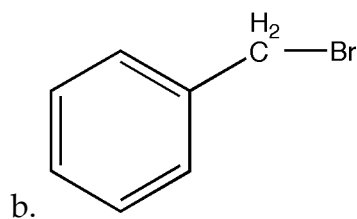
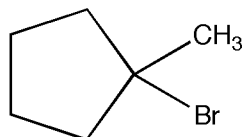
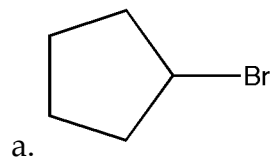
c. Under what conditions will the “other” type of nucleophilic substitution occur for question 1b?

2. Which compound of the following pairs would be the first to precipitate AgBr from an AgNO₃ solution?





3. Which of the following pairs of compounds would result in the most rapid precipitation of NaBr from an NaI/acetone solution?



d. Is **acetone** a protic solvent? So which type of nucleophilic substitution are these?

e. NaBr is a sodium salt! Why would you expect NaBr to **precipitate** (i.e., not dissolve) in this solvent?