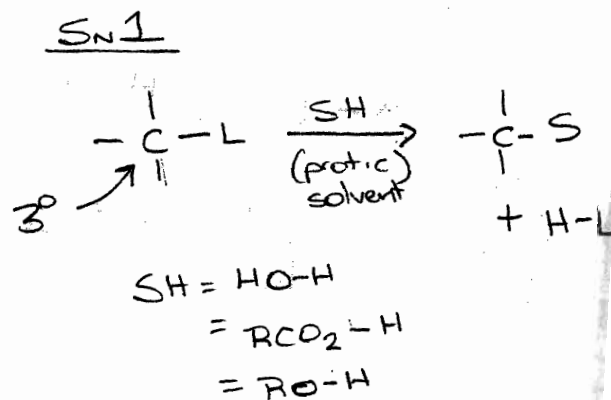
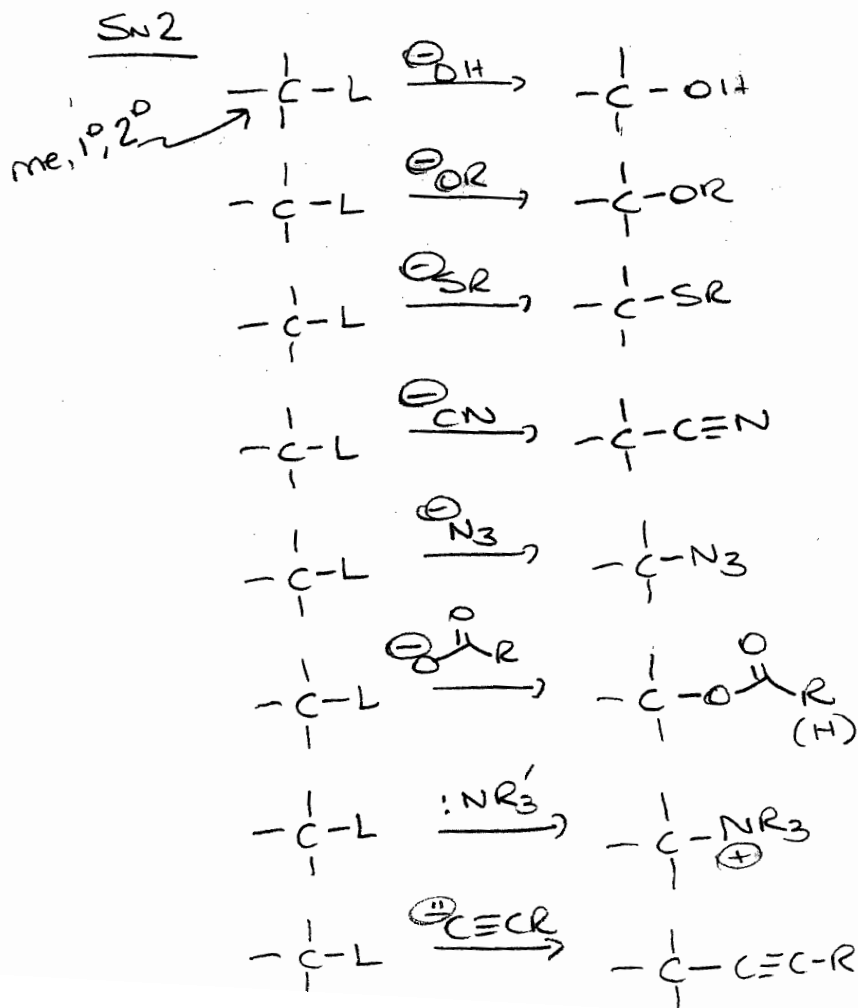
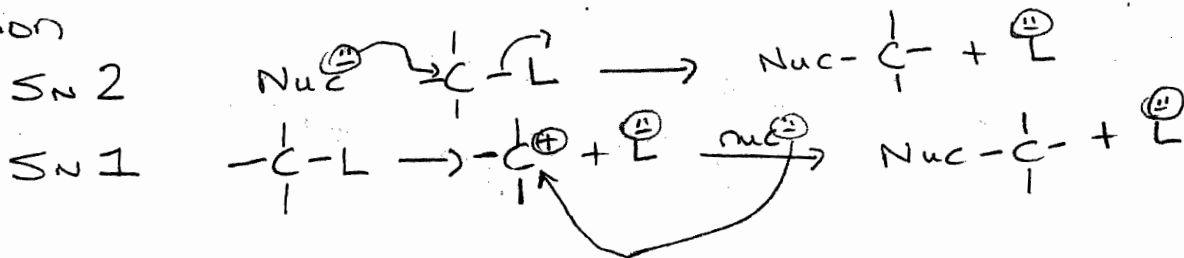
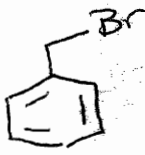
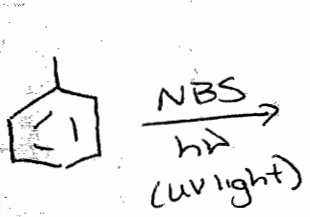
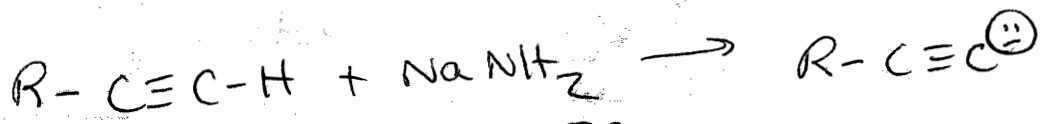
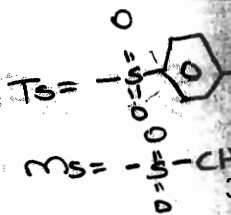
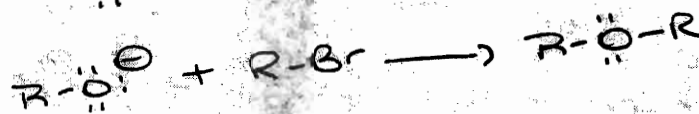
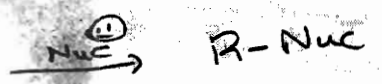
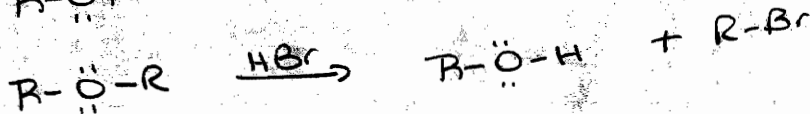
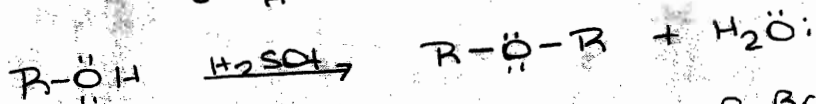
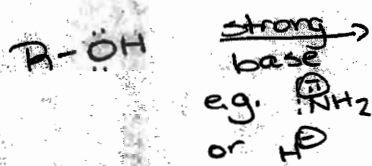
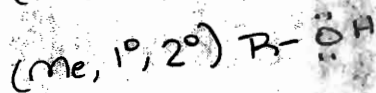
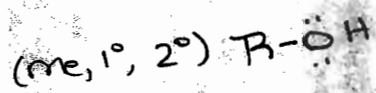
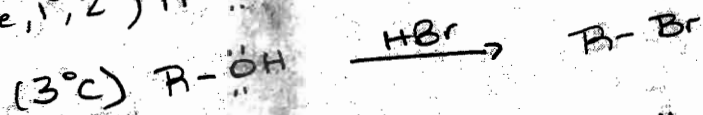
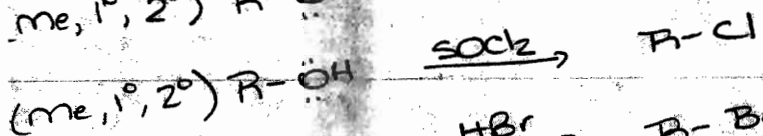
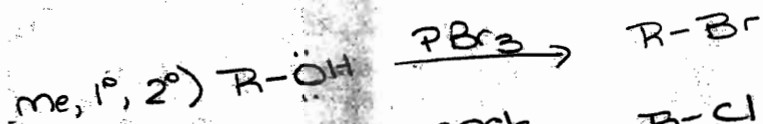


Substitution



Other Rxns

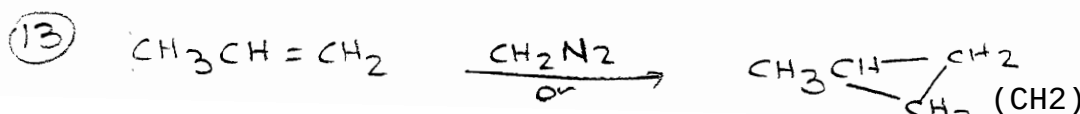
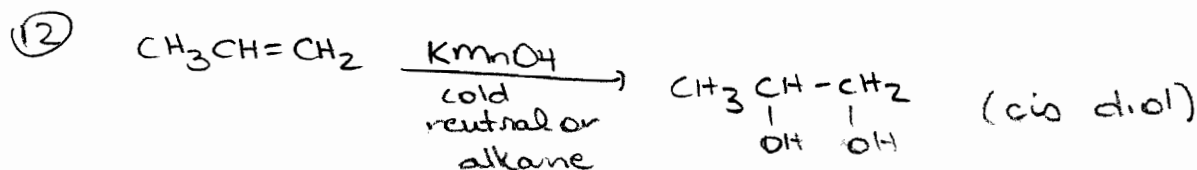
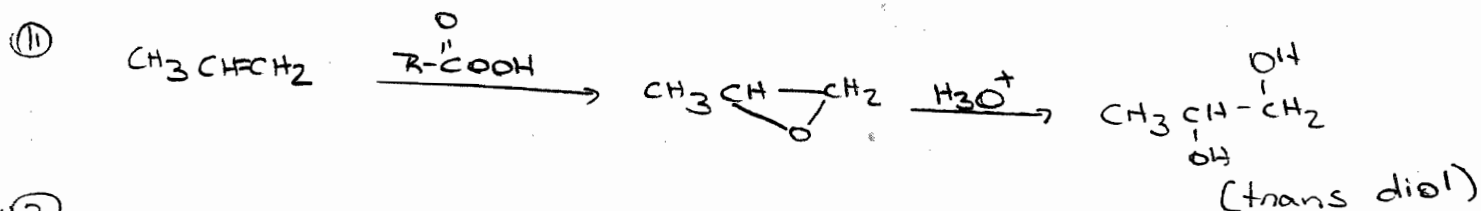
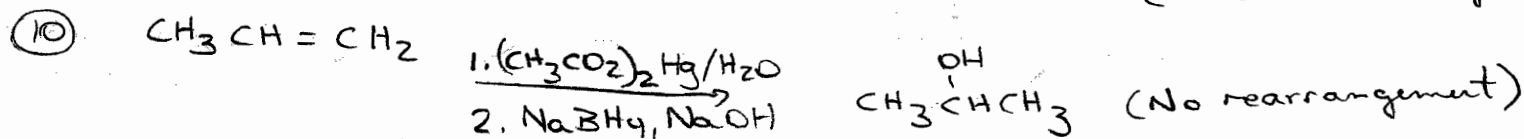
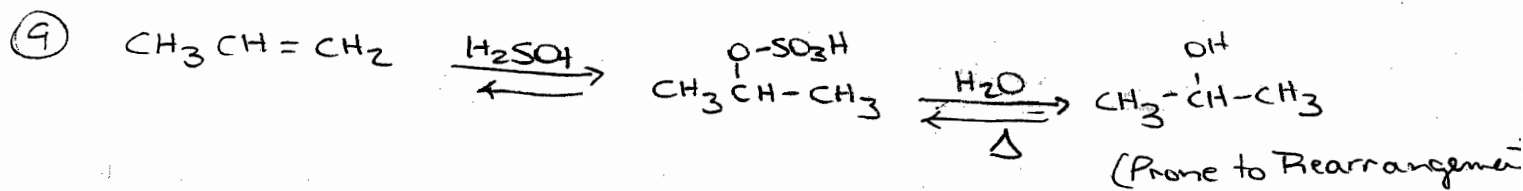
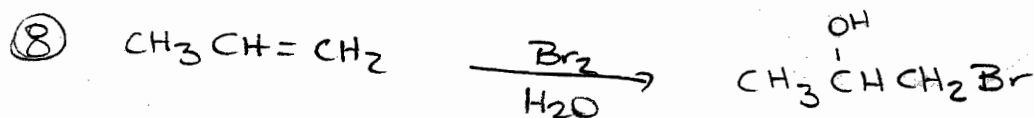
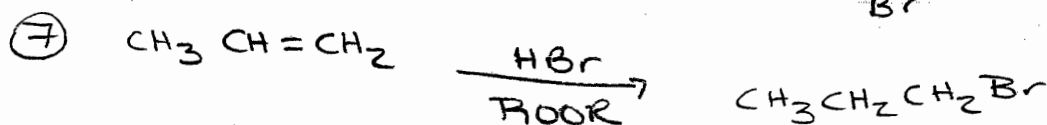
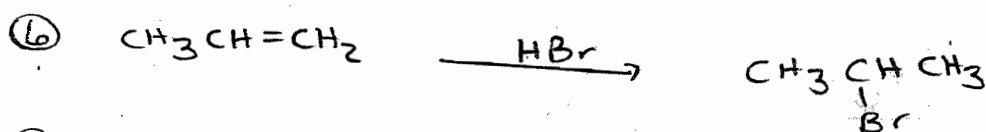
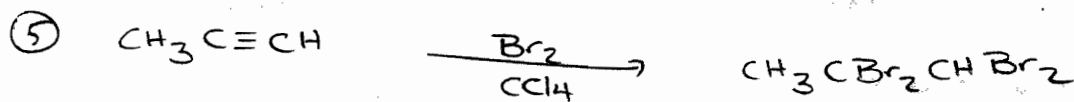
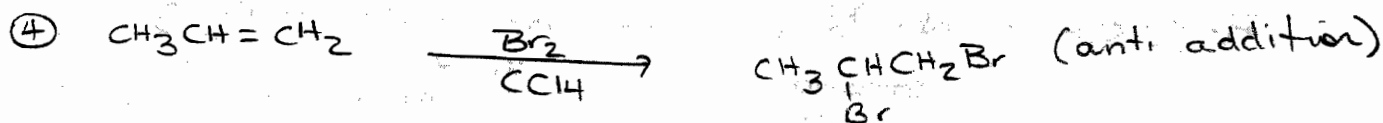
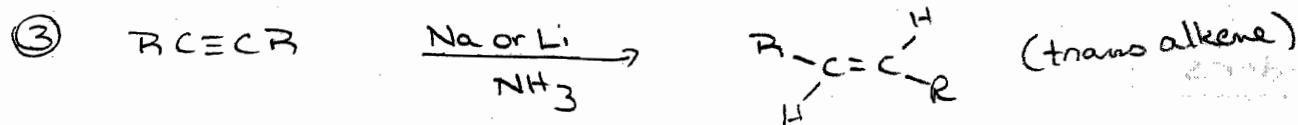
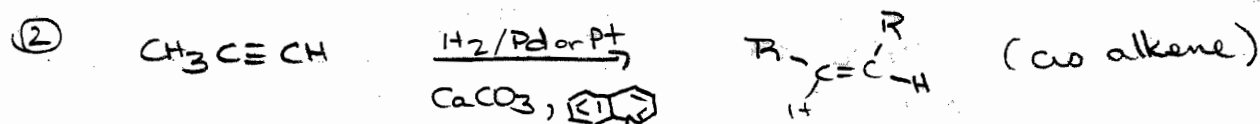
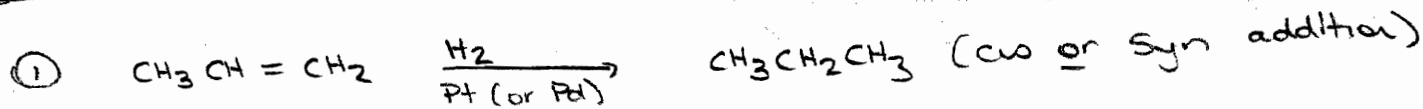


(Benzylic Bromination)

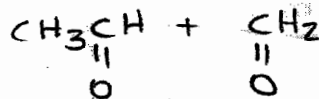
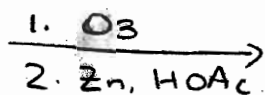
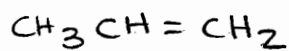
Elimination Reactions

- ① $\begin{array}{c} \text{H} \\ | \\ -\text{C}-\text{C}- \\ | \quad | \\ \quad \text{OH} \end{array} \xrightarrow[\text{or H}_3\text{PO}_4]{\text{H}_2\text{SO}_4} \begin{array}{c} \diagup \text{C}=\text{C} \diagdown \\ | \quad | \end{array} (+ \text{H}_2\text{O})$ Dehydration
- ② $\begin{array}{c} \text{H} \\ | \\ -\text{C}-\text{C}- \\ | \quad | \\ \quad \text{Br} \end{array} \xrightarrow[\text{KOH}]{\text{alcohol}} \begin{array}{c} \diagup \text{C}=\text{C} \diagdown \\ | \quad | \end{array} (+ \text{KBr} + \text{H}_2\text{O})$ Dehydrohalogenation
- ③ $\begin{array}{c} \text{Br} \\ | \\ -\text{C}-\text{C}- \\ | \quad | \\ \quad \text{Br} \end{array} \xrightarrow[\text{EtOH}]{\text{Zn}} \begin{array}{c} \diagup \text{C}=\text{C} \diagdown \\ | \quad | \end{array} + (\text{Zn}^{2+} + 2\text{Br}^-)$
- ④ $\begin{array}{c} \text{H} \\ | \\ -\text{C}-\text{C}- \\ | \quad | \\ \quad \oplus \text{N}-\text{R} \\ \quad \diagup \quad \diagdown \\ \quad \text{R} \quad \text{R} \end{array} \xrightarrow[\text{H}_2\text{O}]{\text{Ag}_2\text{O}} \begin{array}{c} \diagup \text{C}=\text{C} \diagdown \\ | \quad | \end{array} \text{ (Hofmann Elimination)}$
- ⑤ $\begin{array}{c} \text{H} \\ | \\ -\text{C}-\text{C}- \\ | \quad | \\ \quad \text{O-Ts} \end{array} \xrightarrow{\text{Base}} \begin{array}{c} \diagup \text{C}=\text{C} \diagdown \\ | \quad | \end{array}$
- ⑥ $\begin{array}{c} \text{Br} \quad \text{Br} \\ | \quad | \\ -\text{C}-\text{C}- \\ | \quad | \\ \text{H} \quad \text{H} \end{array} \xrightarrow{:\text{NH}_2^-} -\text{C}\equiv\text{C}- (+ 2\text{NH}_3 + 2\text{Br}^-)$

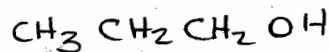
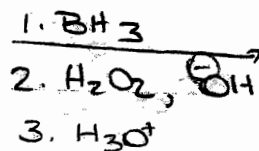
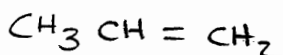
Addition Reactions



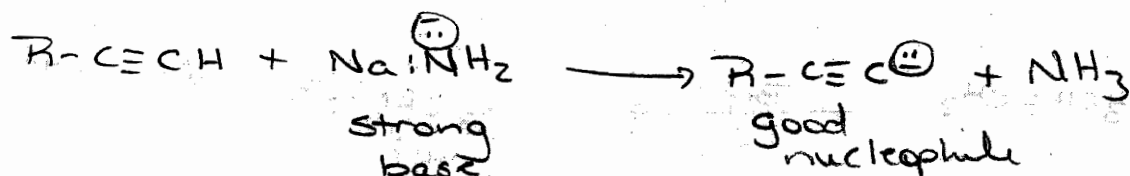
(14)



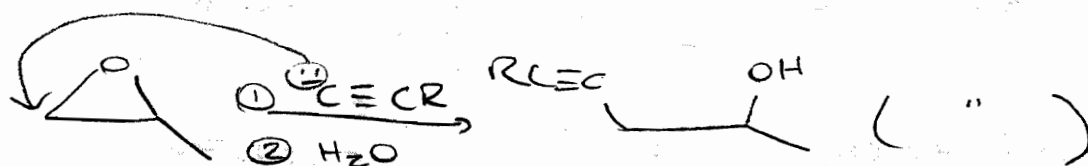
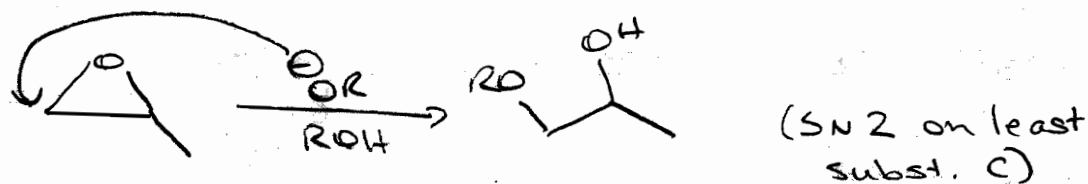
(15)



Reminders



Basic Conditions



Acidic Conditions

