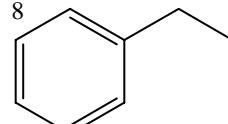
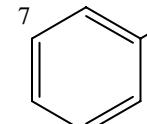
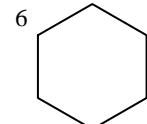
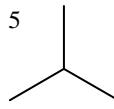
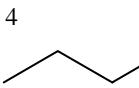
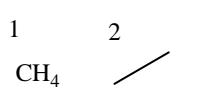


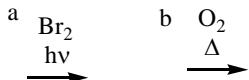
## Reactions Studied Through Chem 315 – Review (Partial Key Starts on Page 3)

### A. Alkane Reactions

Example Reactants

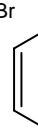
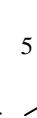
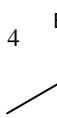


Reaction Conditions Studied

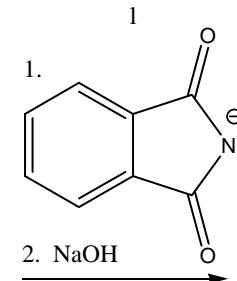
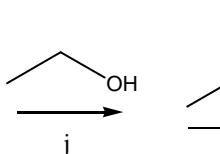
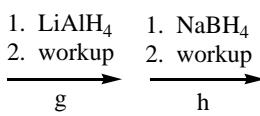
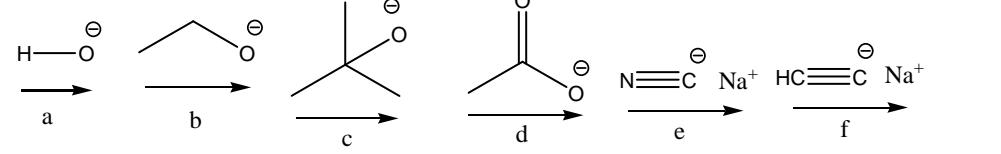


### B. RX Compounds

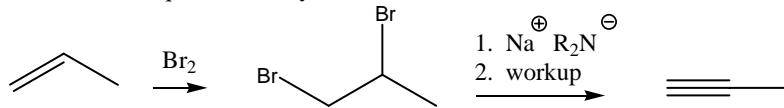
Example Reactants



Reaction Conditions Studied



Extra Reaction Sequence to Alkynes

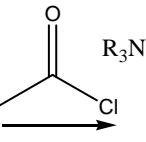
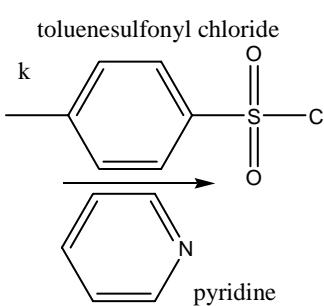
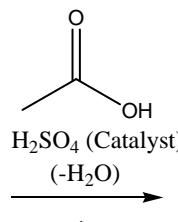
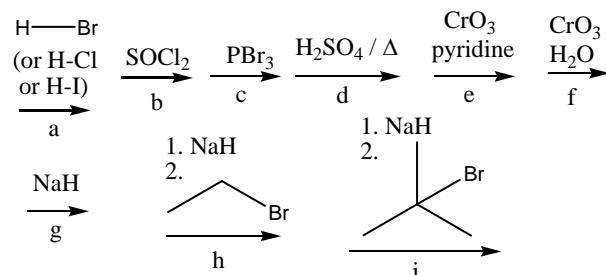


### C. ROH Reactions

Example Reactants

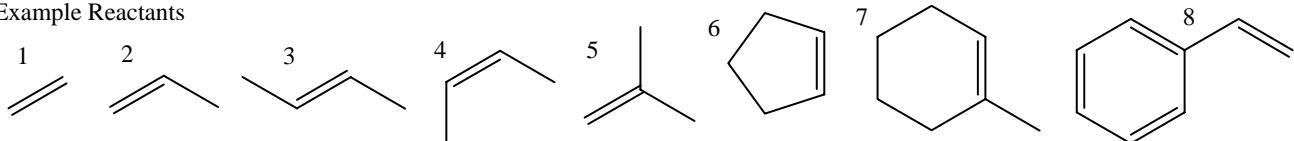


Reaction Conditions Studied

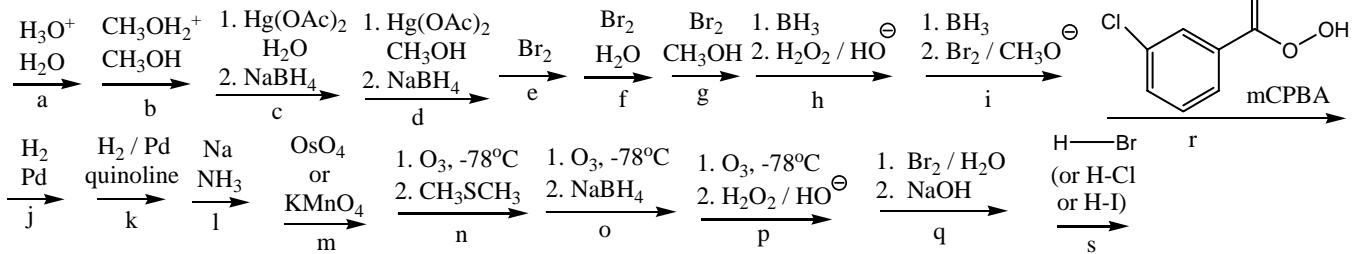


## D. Alkene Reactions

Example Reactants

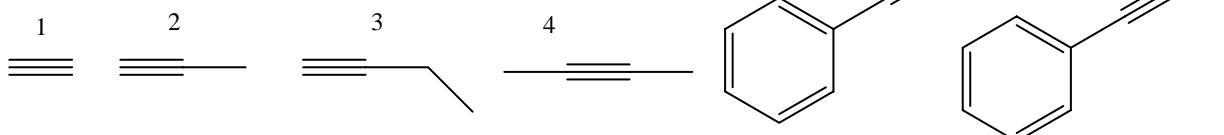


Reaction Conditions Studied

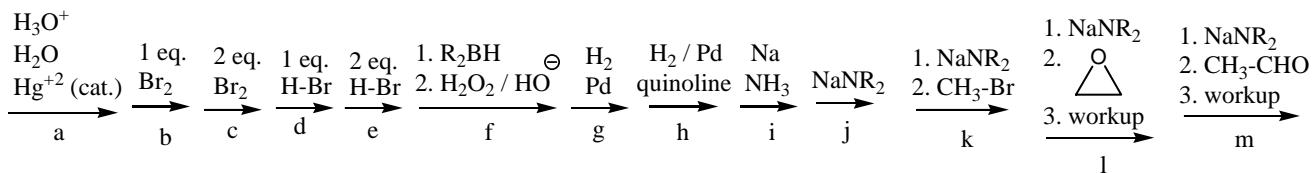


## E. Alkyne Reactions

Example Reactants

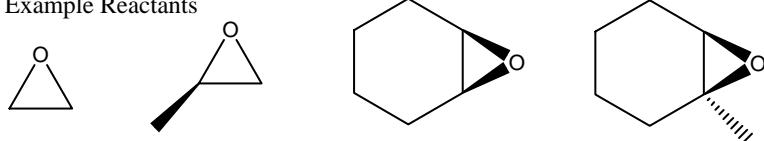


Reaction Conditions Studied



## F. Epoxide Reactions

Example Reactants

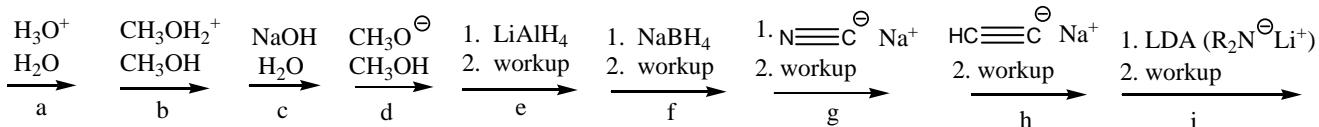


Epoxides can be prepared from alkenes 2 ways.

mCPBA

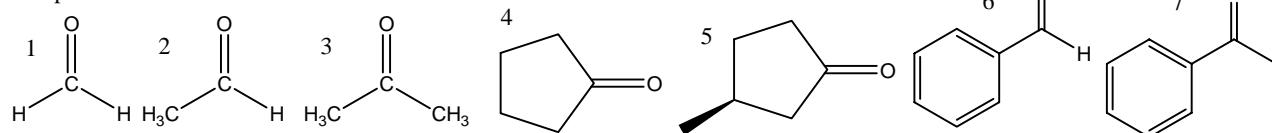
1.  $\text{Br}_2 / \text{H}_2\text{O}$   
2.  $\text{NaOH}$

Reaction Conditions Studied

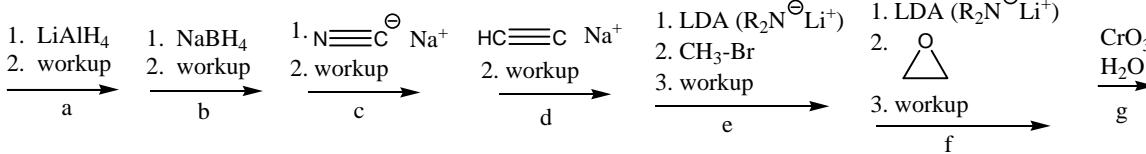


## G. Carbonyl Reactions

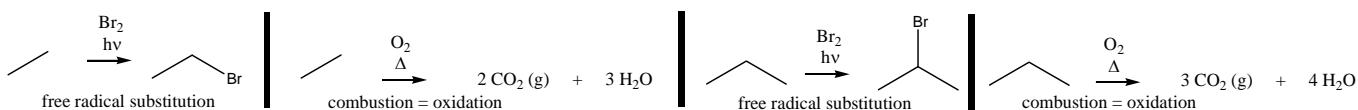
Example Reactants



Reaction Conditions Studied

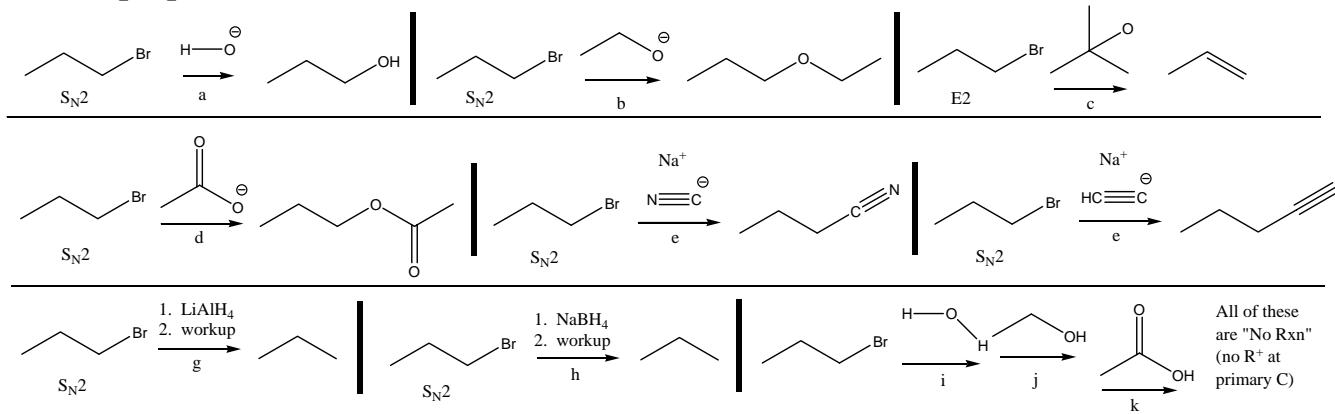


## Possible Answers: Alkane Reactions

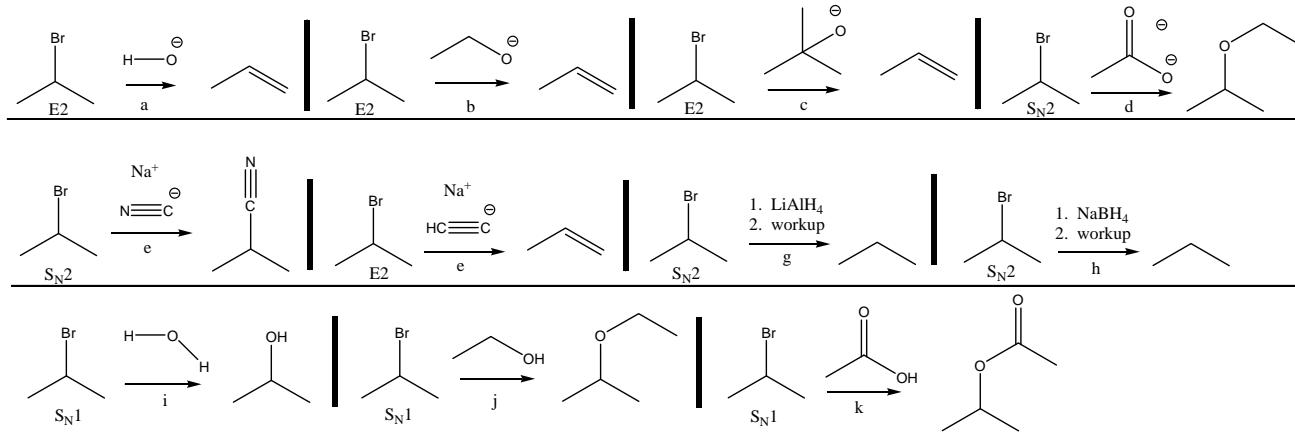


## RX Reactions

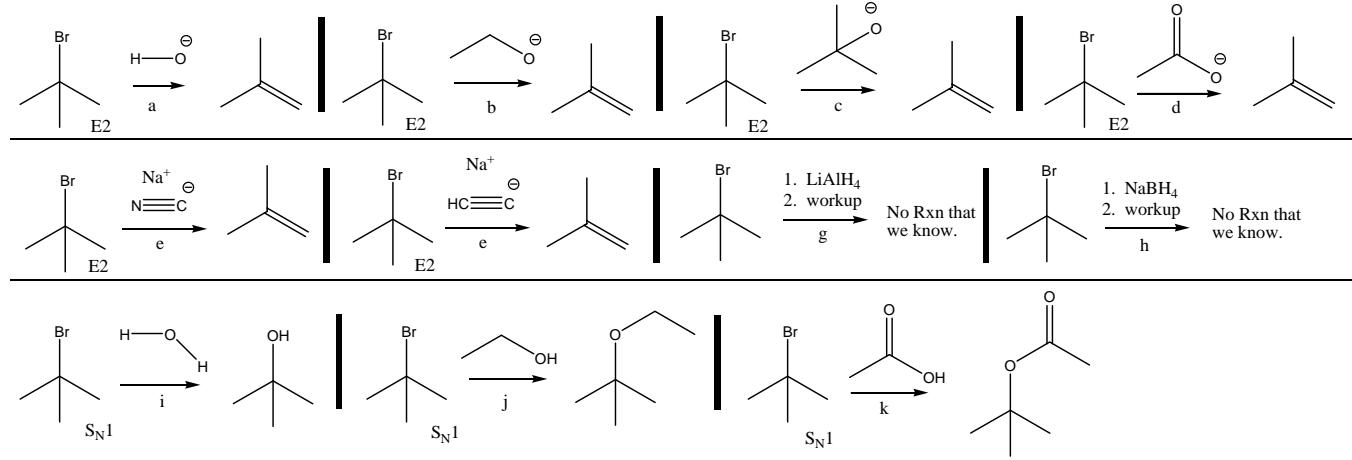
### 1-bromopropane



### 2-bromopropane

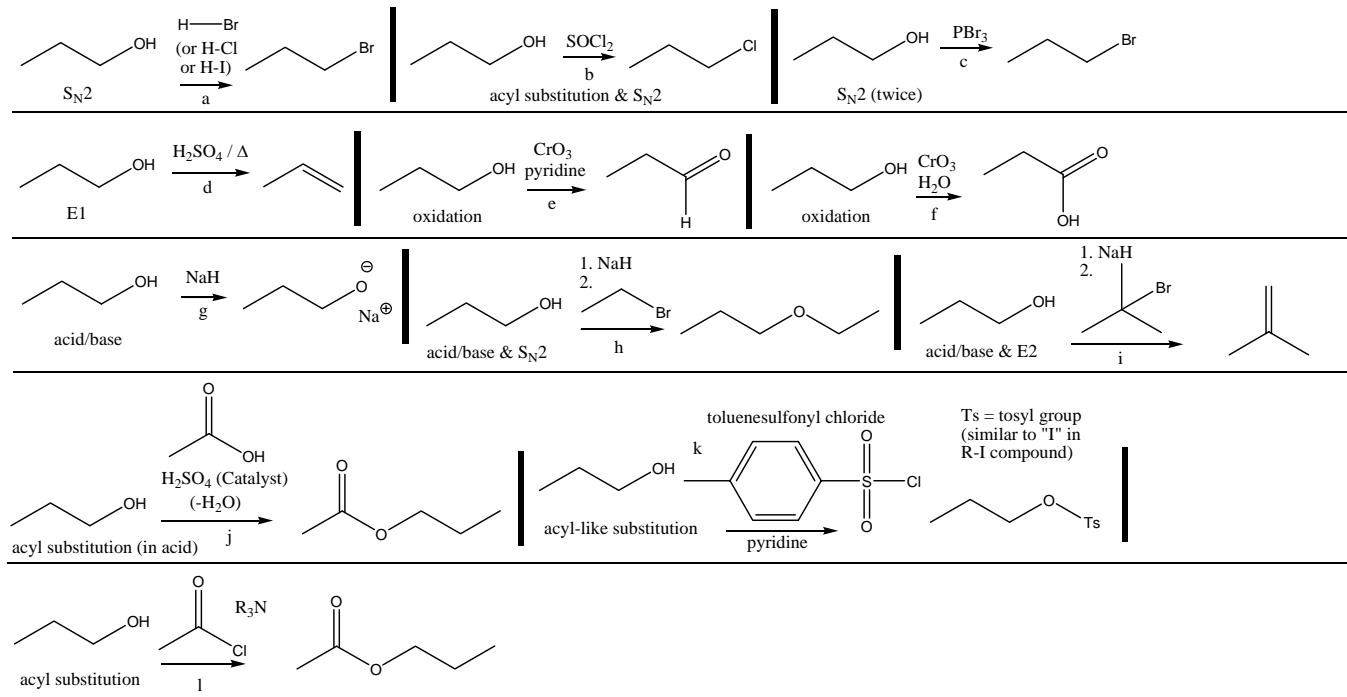


### 2-bromo-2-methylpropane

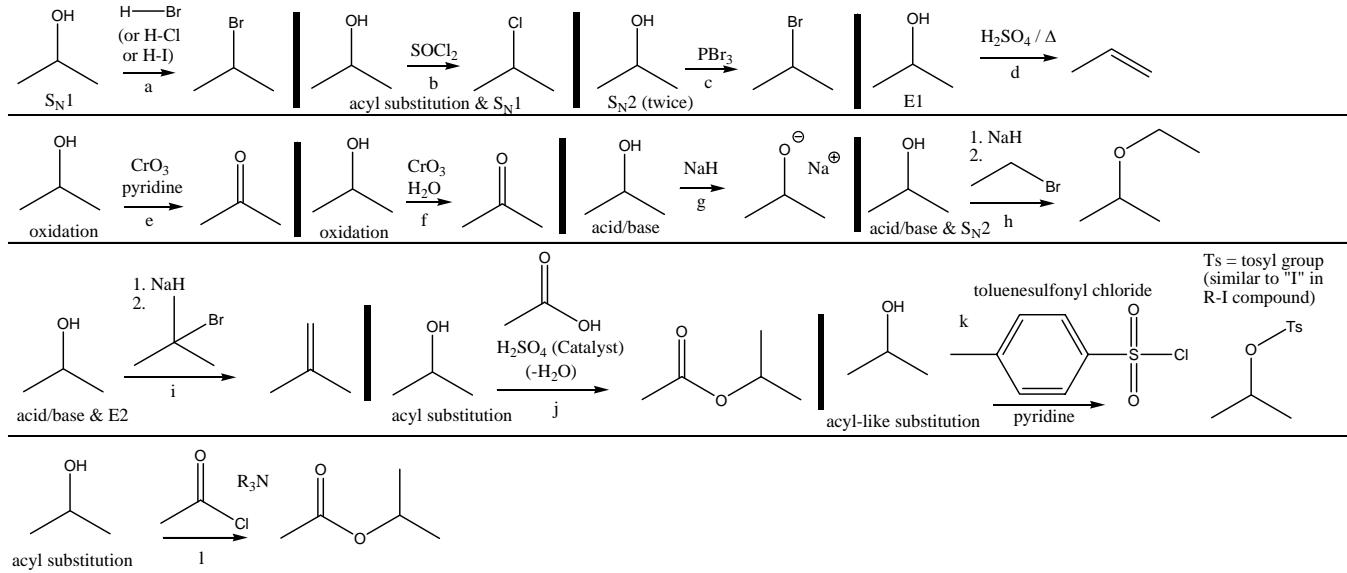


## ROH Reactions

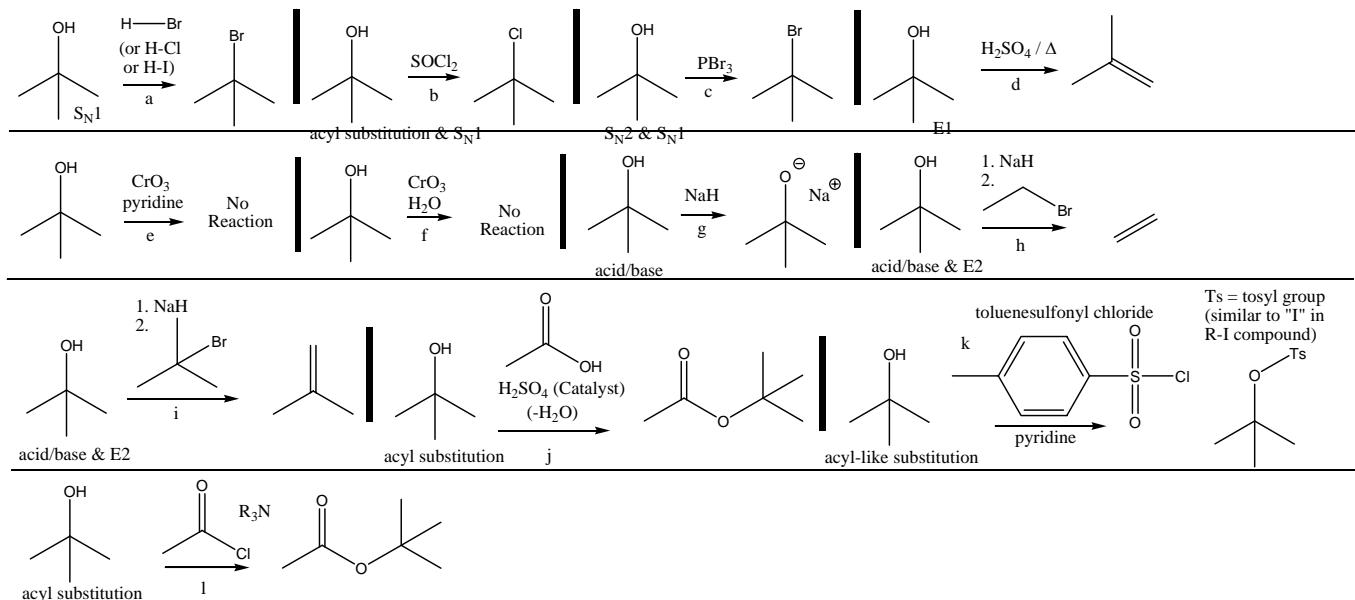
### 1-propanol



### 2-propanol (isopropyl alcohol)

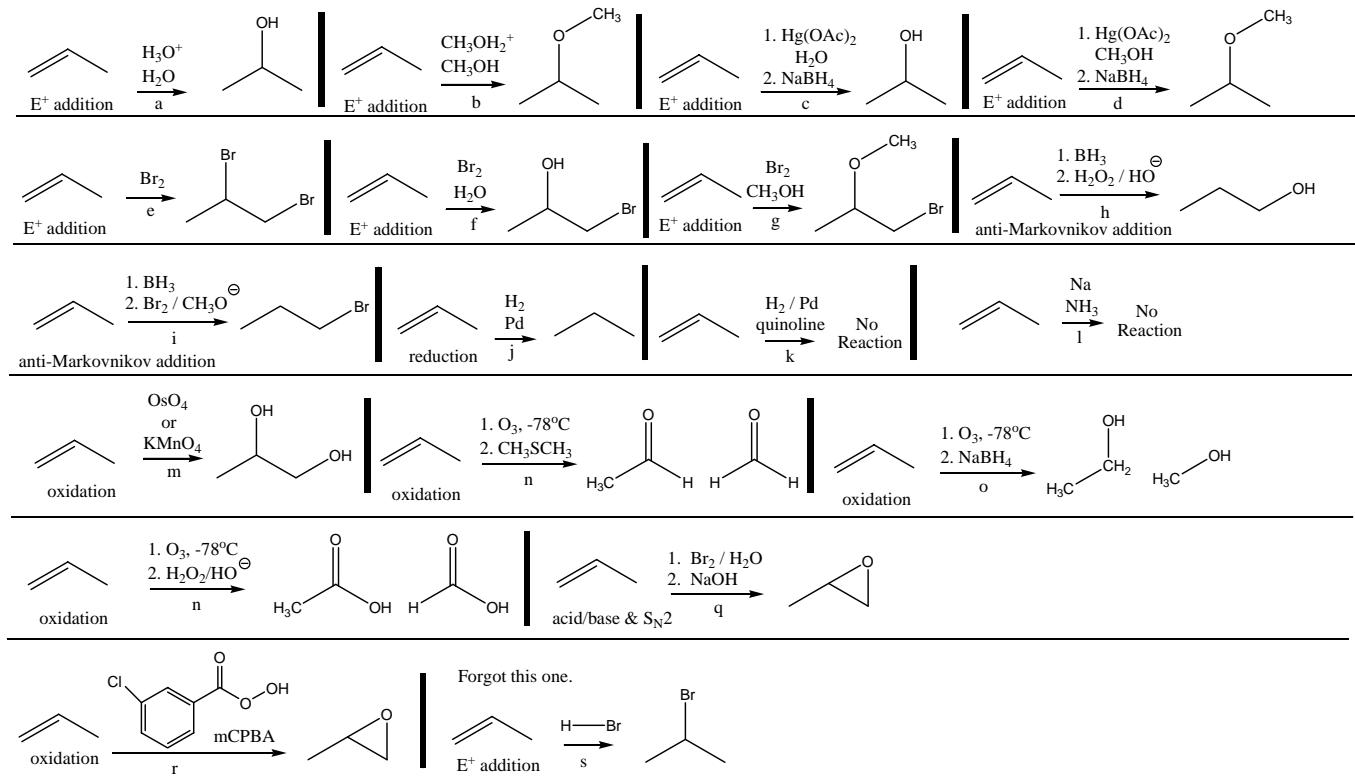


## 2-methyl-2-propanol (t-butyl alcohol)

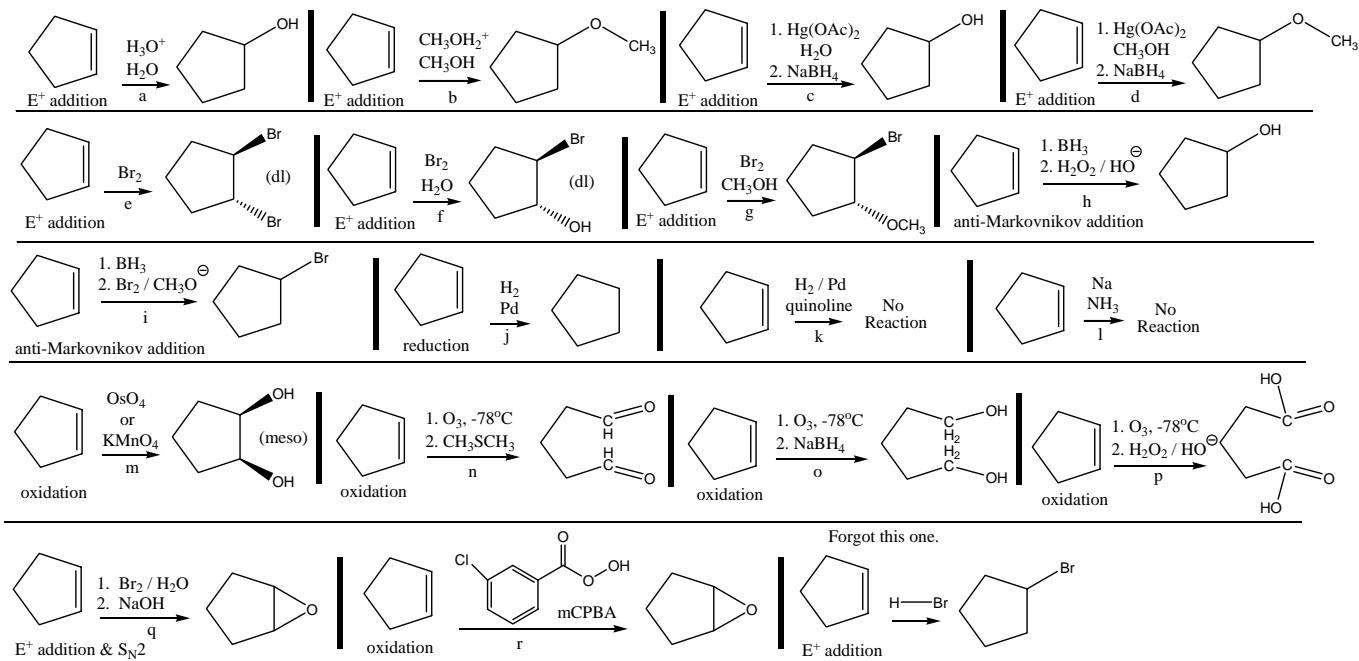


## Alkene Reactions

### propene

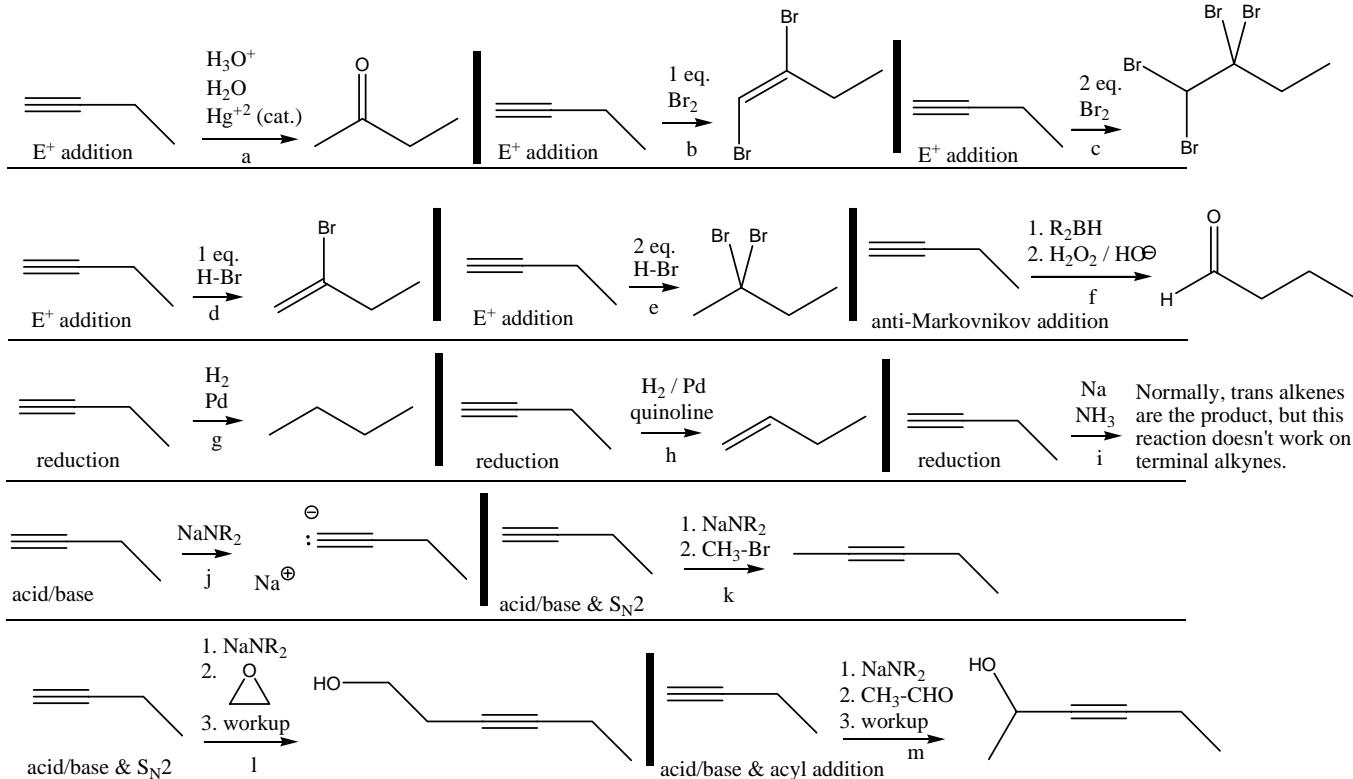


## cyclopentene

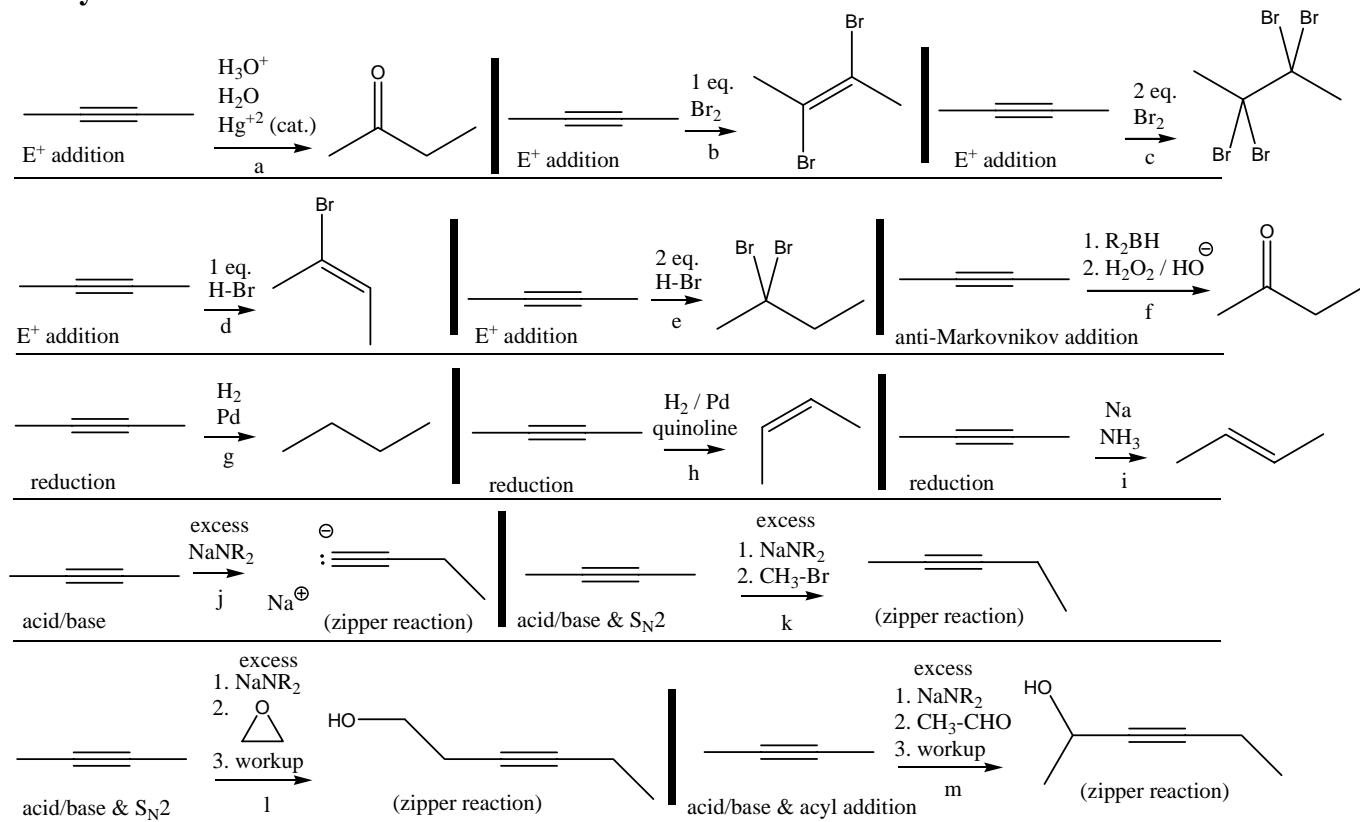


## Alkyne Reactions

### 1-butyne

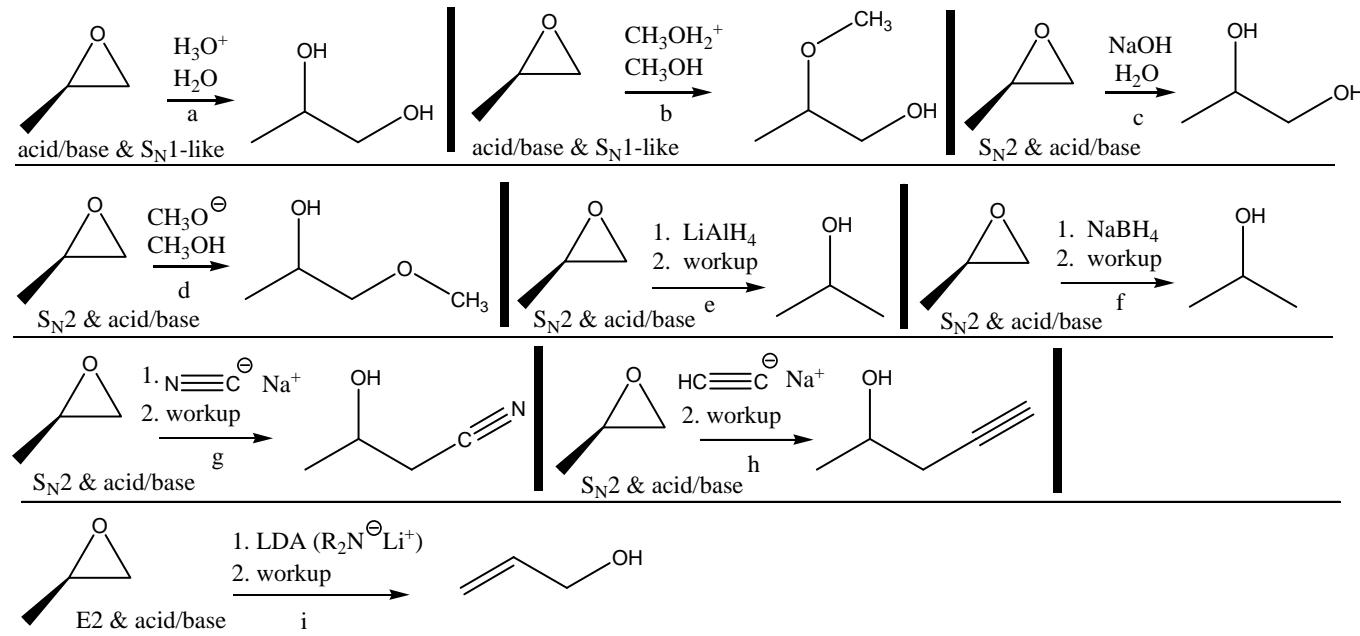


## 2-butyne

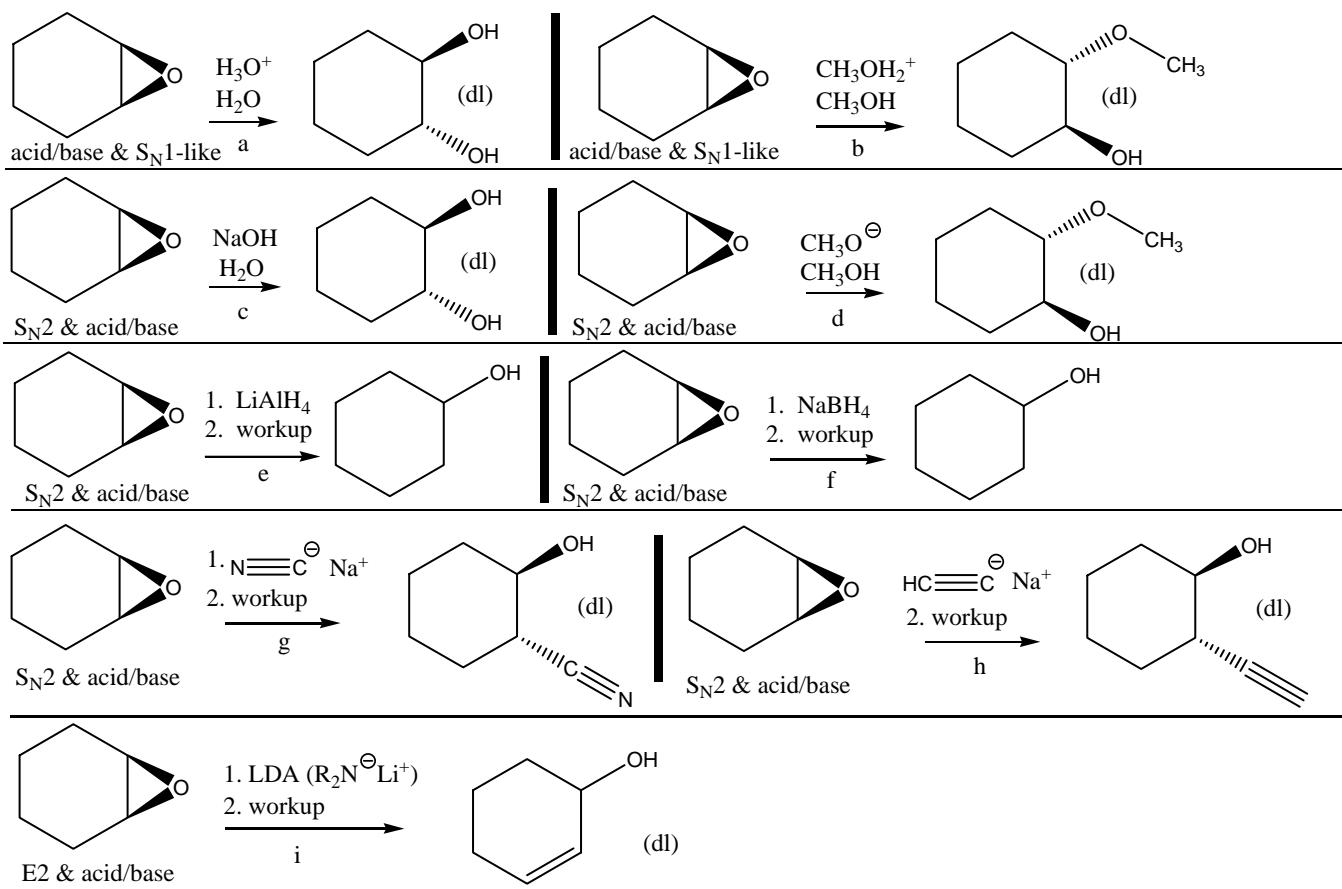


## Epoxide Reactions

### propeneoxirane

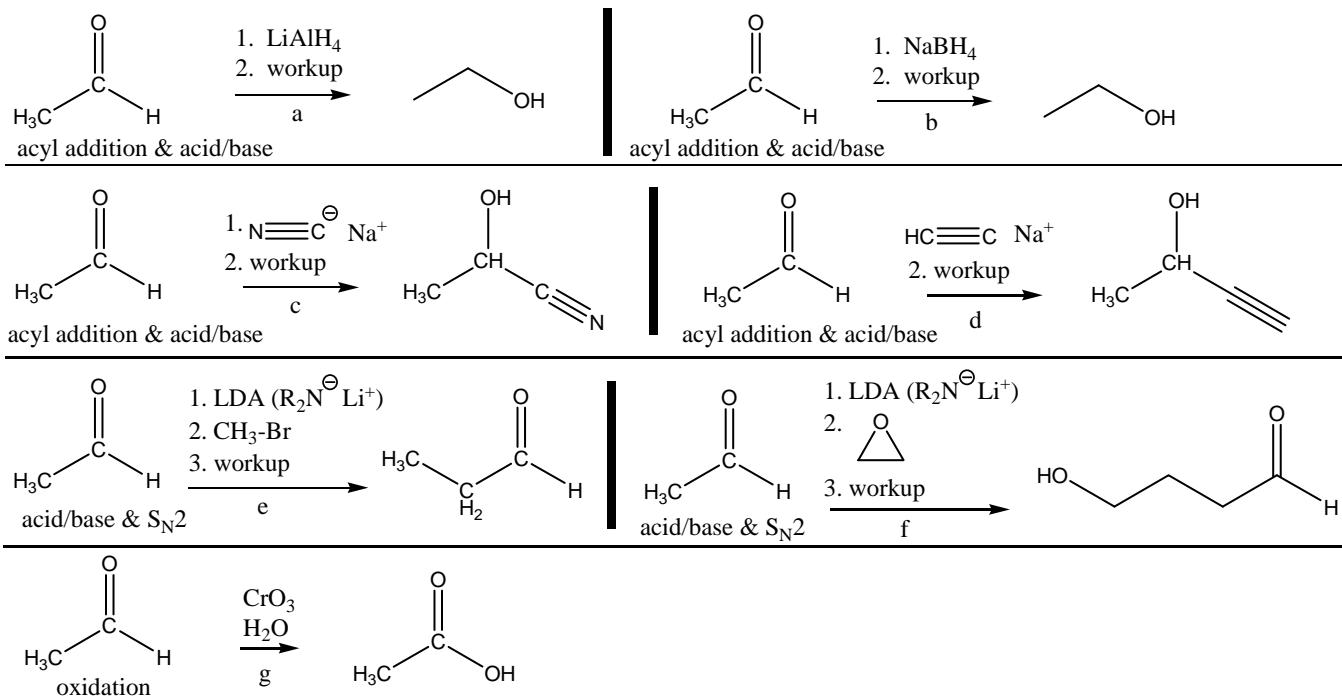


### cyclohexeneoxirane



### Carbonyl Reactions

#### ethanal (acetaldehyde)



**propanone (acetone)**

