Exercise 8: Epoxides and organometallic compounds

1. Predict the main product of each reaction:

a. 

b. 

c. 

d. \((\text{CH}_3)_3\text{MgCl}\) \(\text{CO}_2\) \(\text{H}^+, \text{H}_2\text{O}\)

e. \((\text{CH}_3)_4\text{C}\) \(\text{Cl}_2\) \(\text{hv}\) \(\text{Mg}\) \(\text{ether}\) \(\text{I}_2\)
2. Write the reagents needed to carry out the two-step synthesis below:

3. Write the reagents needed to carry out the two-step synthesis below: