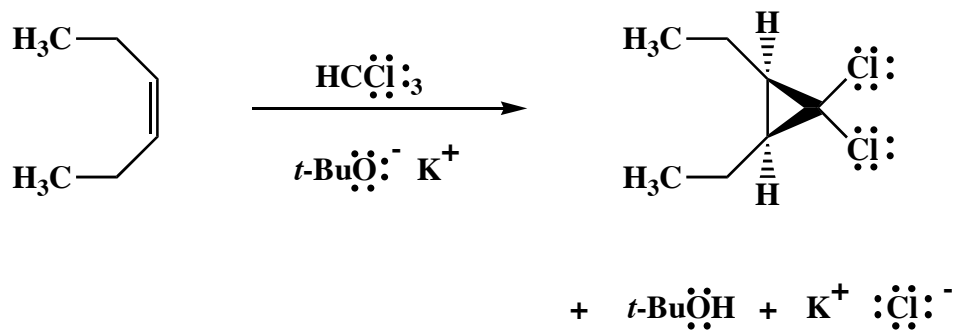


Week 11 Group Questions

1. Draw the mechanism of the following reaction, using the curved-arrow notation to indicate the reorganization of electron density. Show all intermediates, unshared electrons, formal charges and countercharges where appropriate. Describe clearly why the observed stereochemistry is as shown.



2. Design a synthesis of the following racemic, disubstituted cyclopropane from acetylene, organic compounds that contain three or fewer carbons, and any additional inorganic reagents that are necessary. Show all reagents and stable synthetic intermediate compounds. Use a star to mark each step that creates a chiral product. Explain clearly why each starred step affords a racemic mixture.

