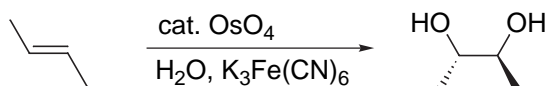
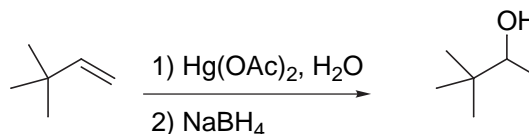
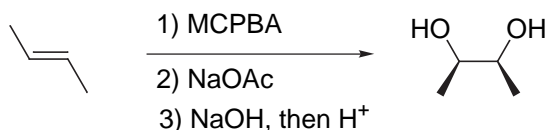
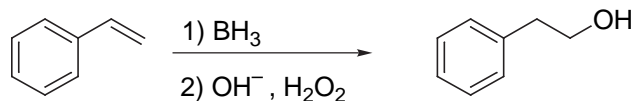
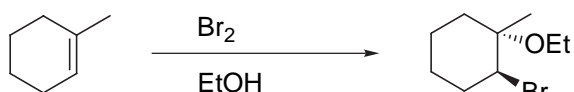
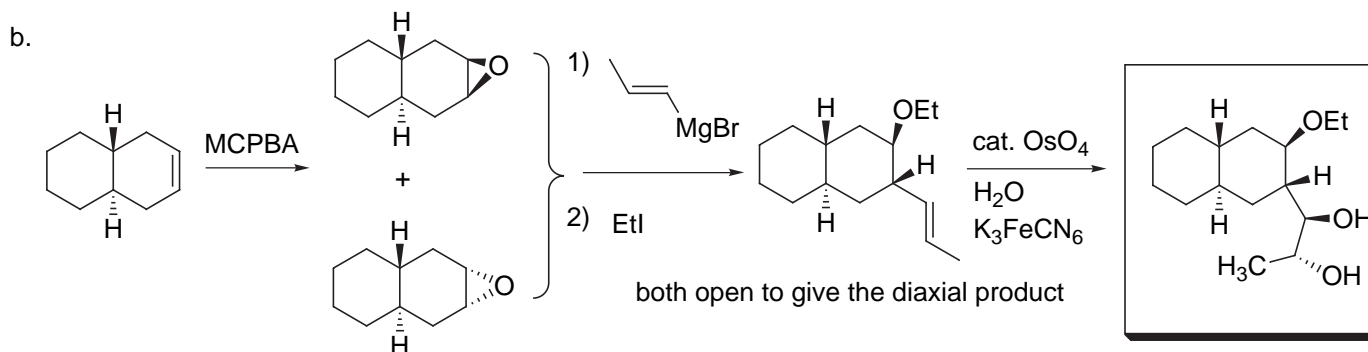
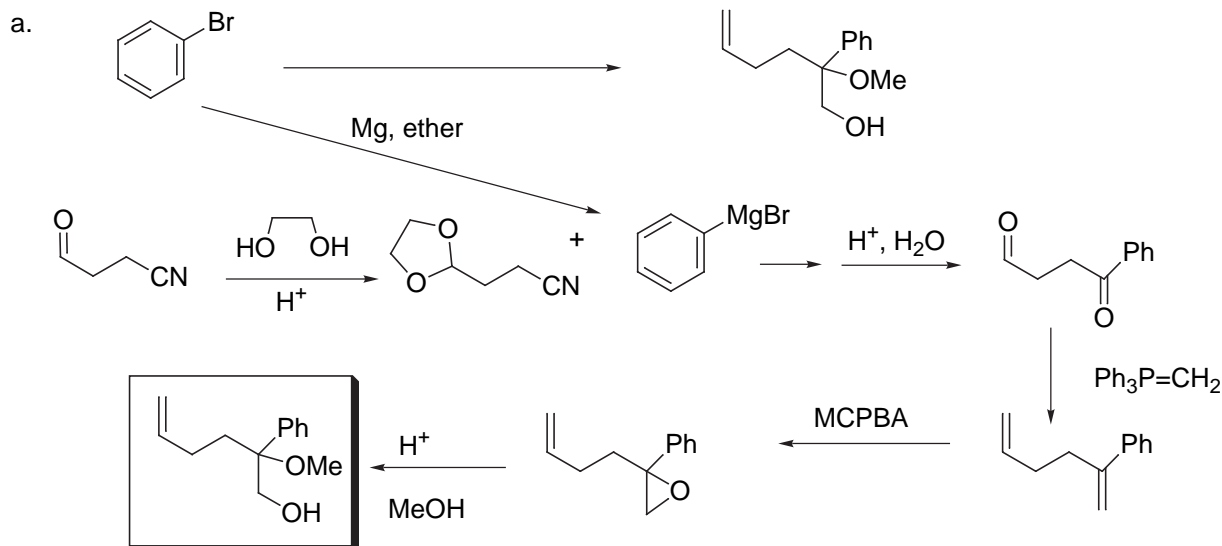


Chem 334, Professor Fox  
 Problem Set #1 Use additional paper  
 Due Monday February 17, 2003

1. Fill in the reaction conditions



2. Propose multistep syntheses using the indicated starting material and any other materials containing four carbons or less



NOTE: while the diaxial epoxide opening and the dihydroxylation are both stereoselective, there is a stereochemical issue that the synthesis above does not address: what is it?