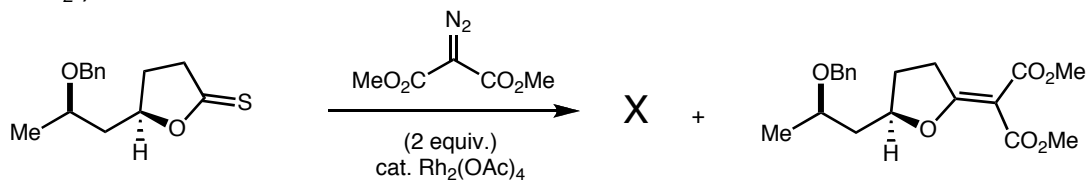


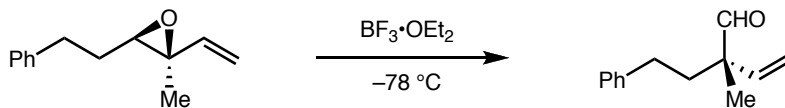
Synthetic Supergroup
 March 10, 2008
 Problem Set
 Charlie Allen

1. Provide a mechanism for the conversion of reactant to product and identify **X**. (*Hint: X is not N₂!*)



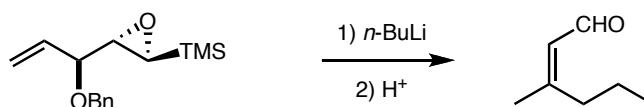
Honda, *Tetrahedron*, **1992**, 48, 79.

2. Provide a mechanism for the following transformation that clearly explains the formation of the indicated aldehyde *exclusively*.



Jung, M. *JACS*, **1995**, 7379.

3. Provide a mechanism that accounts for this stereo-destructive process.



Jung, M. *JOC*, **1998**, 61, 9065.