Group Meeting Problems - Nov 3, 2009

1. Please provide a mechanism for this transformation, accounting for stereochemistry when necessary.

2. Please provide a mechanism along with the stereochemical outcome of this transformation.

$$\begin{array}{c|c}
 & \text{OAC} & \text{OTBS} \\
 & \text{Ewis acid} \\
 & \text{IA}
\end{array}$$