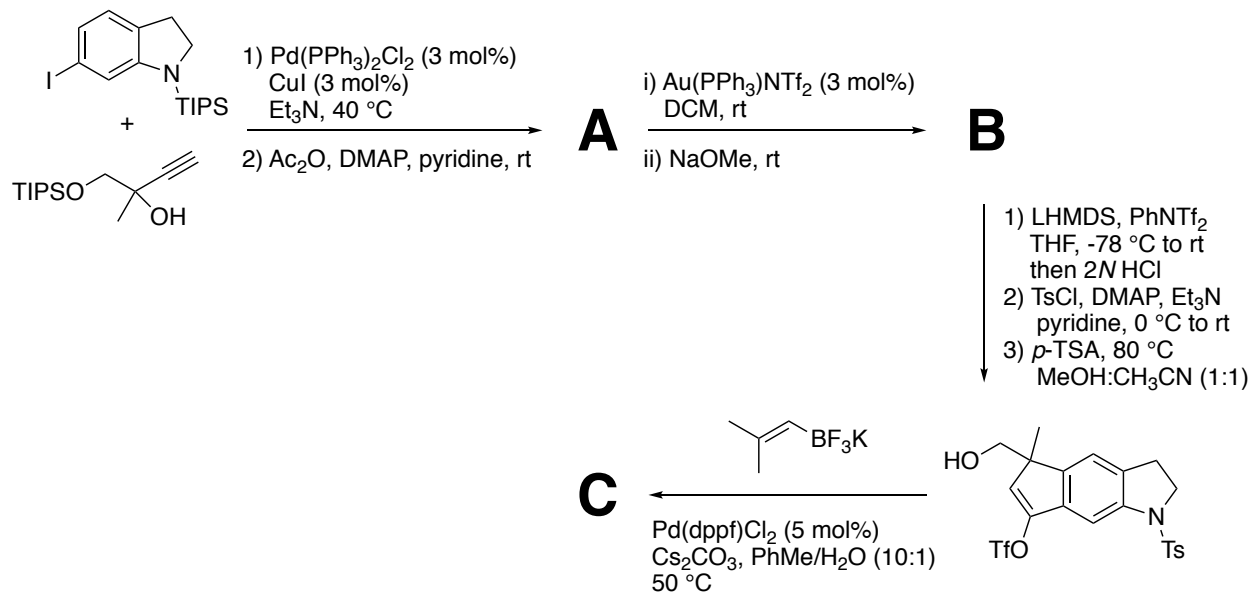
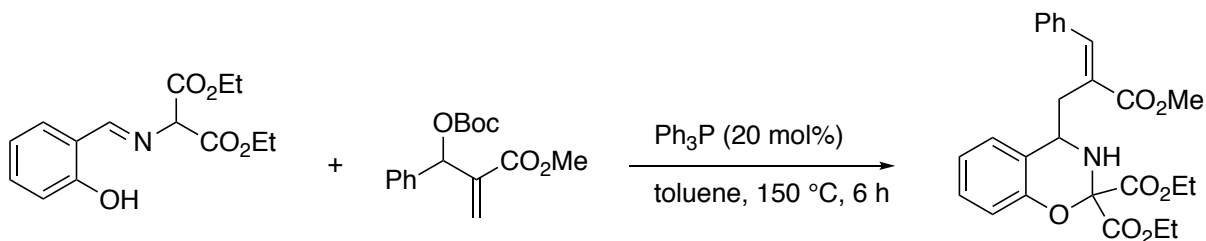


WORMS Problem Set
8/29/2018

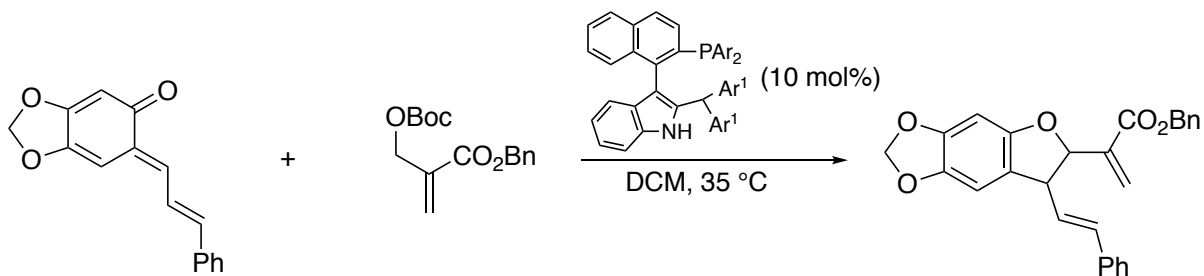
1. Provide the missing structures and explain the reactions.



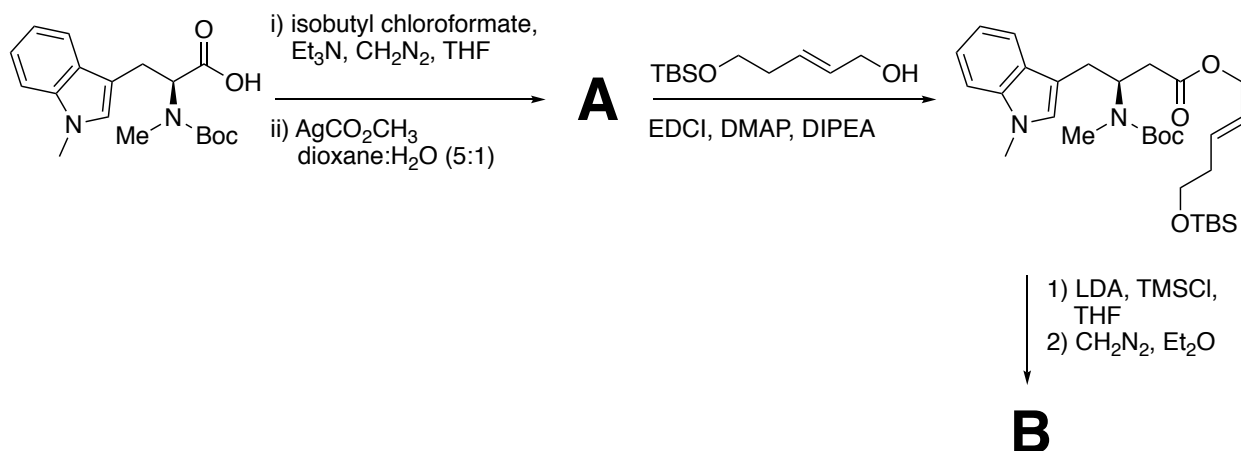
2. Provide a plausible mechanism for the following:



3. Provide a plausible mechanism for the following:



4. Provide the missing structures and explain the reactions.



5. The Ireland-Claisen rearrangement of the alpha-alkoxy ester below produces two different diastereomers depending on the conditions of the reaction. Explain the observed stereodivergence.

