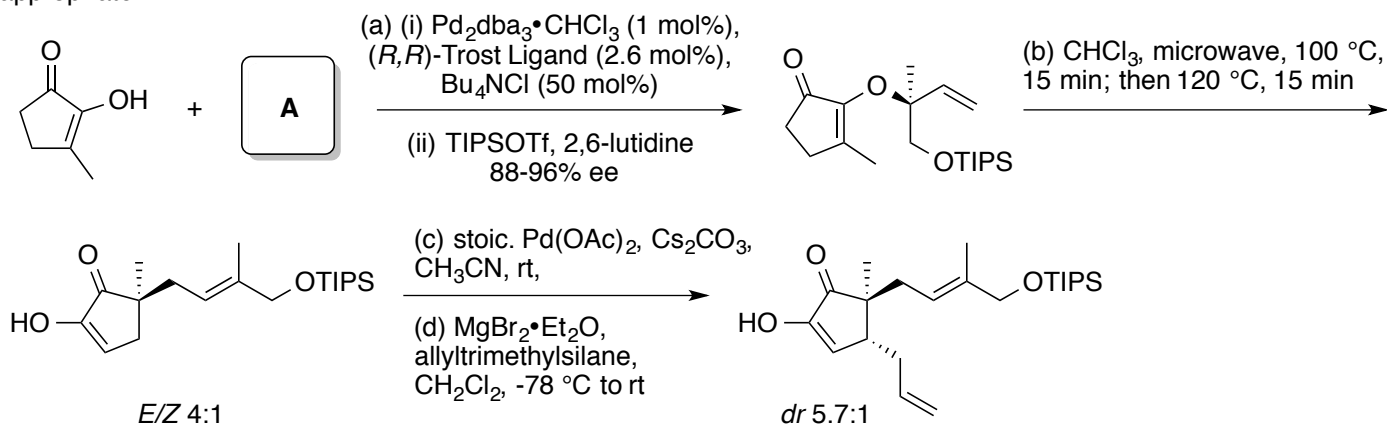
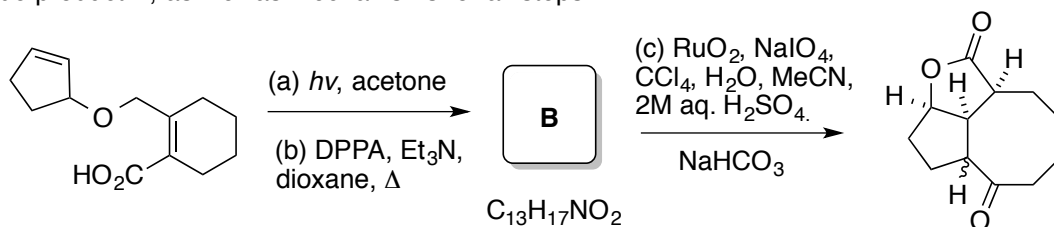


Question One (an exercise in named reactions)

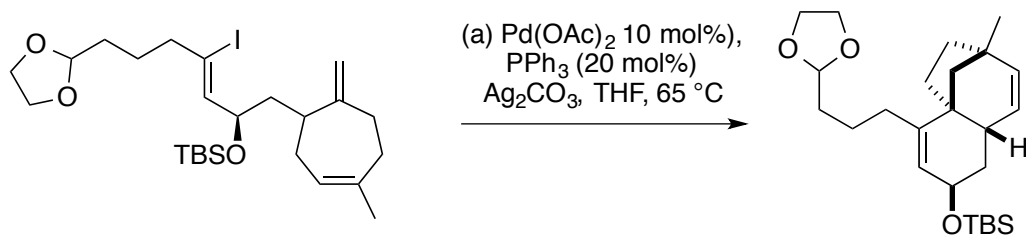
Please propose a structure for starting material A, mechanisms for steps b-d and stereochemical reasoning where appropriate.

**Question Two**

Please provide product B, as well as mechanisms for all steps

**Question Three**

Please provide the mechanism

**Question Four**

Please provide compounds A-C as well as mechanisms and stereochemical reasoning where necessary

