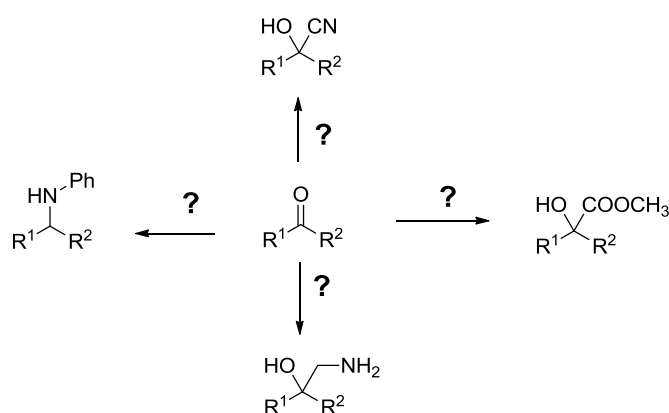
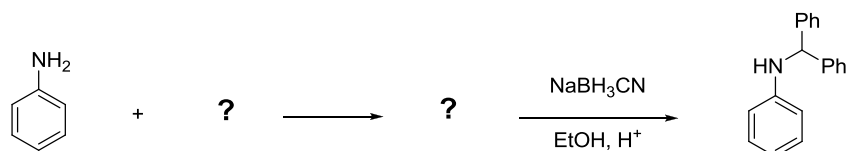


Problems – Set 5: Carbonyl compounds (part 2)

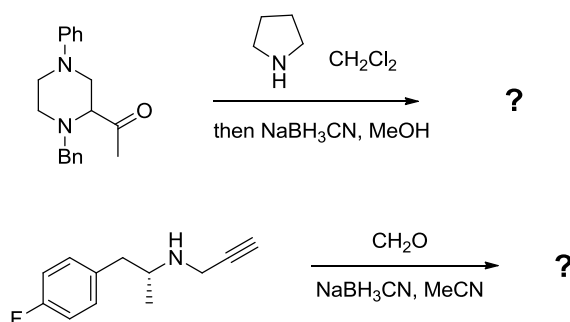
Problem 1

Find the missing compounds and conditions for the following transformations (may include more than one step) and provide the mechanism for each transformation.

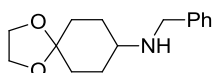


Problem 2

Find the products for the following reductive amination reactions and draw mechanism for each:

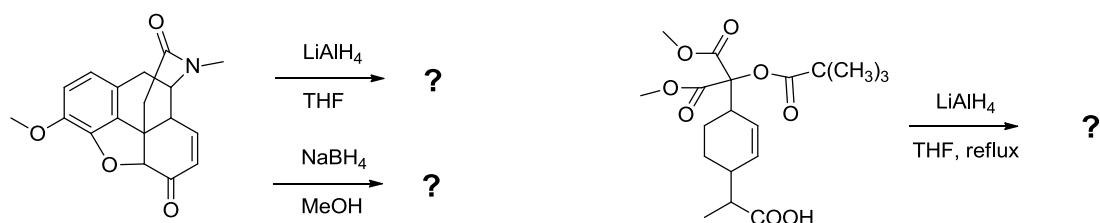


Suggest the transformations to synthesize the following compound from simple starting materials of your choice:



Problem 3

Find the structure of the products for the following reduction reactions:



Problem 4

Based on the leaving group property, give an explanation for the reductions of these different amides:

