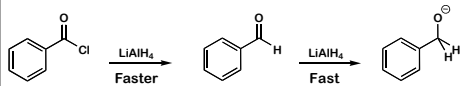
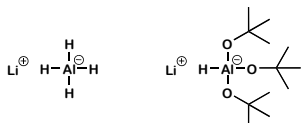


In doing a laboratory experiment what is a problem with faster and fast?

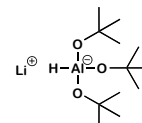
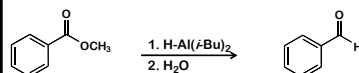
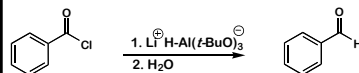


It is too fast! How can the reactivity of LiAlH_4 be moderated?

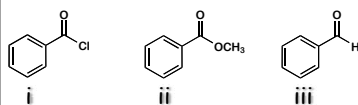
Do we replace H with A. electron donating or B. electron withdrawing groups?



Synthesis of aldehydes by reduction of carboxylic acid derivatives:

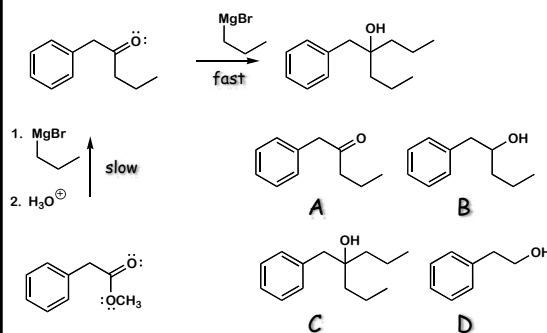


Choose the correct order of increasing reactivity of the following carbonyl groups with LiAlH_4 .

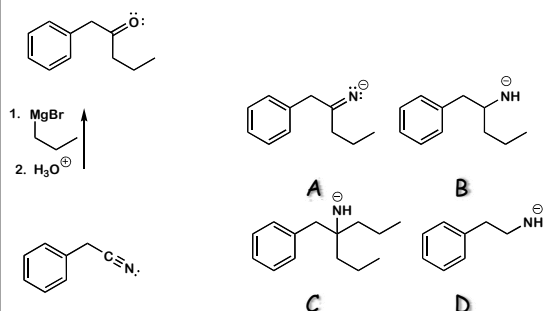


A. i<ii<iii increasing reactivity B. i<iii<ii increasing reactivity
 C. ii<iii<i increasing reactivity D. iii<ii<i increasing reactivity E. iii<i<ii increasing reactivity

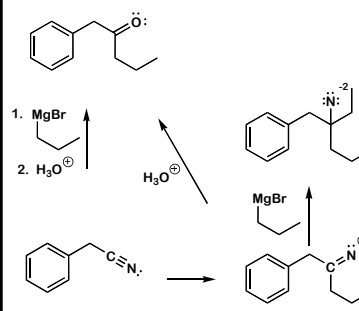
What is the major product of the following reaction?



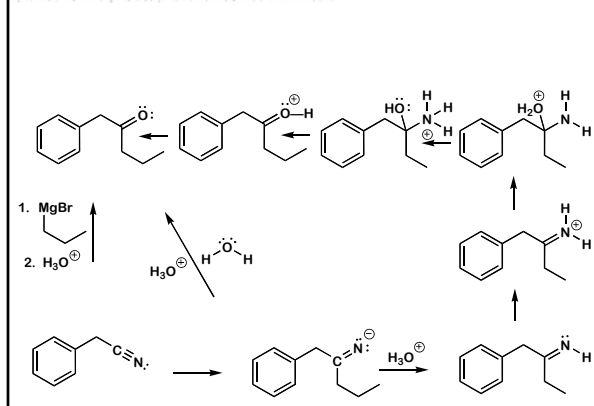
Why does the reaction of nitriles give ketones?
 What is the mechanism of this reaction?
 What is the structure of the first intermediate?



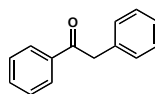
Why does the reaction of nitriles give ketones?
 What is the mechanism of this reaction?



How does this reaction occur?

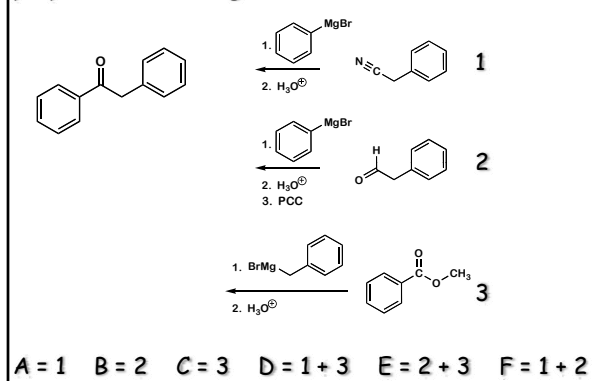


Propose a good synthesis of the following ketone from benzene and compounds containing four carbon atoms or less?



A = 1 B = 2 C = 3 D = 1 + 3 E = 2 + 3 F = 1 + 2

Which of the following reaction sequences would prepare the following ketone?



Propose a good synthesis of the following ketone from benzene and compounds containing four carbon atoms or less?

