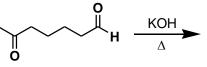
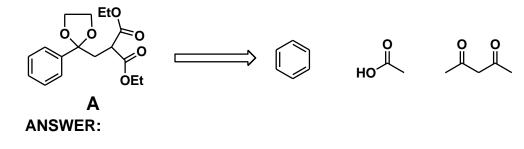


1) Identify the intramolecular products from the reaction of the following dicarbonyl compound treated with base & heat. **3 PTS** (1 point for each answer provided)



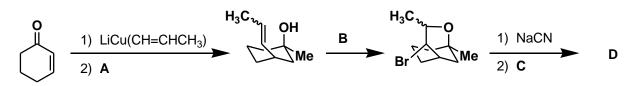
ANSWER:

2) You are now becoming a synthetic chemist and are being asked to synthesize target molecule **A** from the starting materials given. **3 PTS**





3) Provide the missing reagents/structures for the "roadmap" below. (**A** = reagent, **B** = reagent, **C** = reagent, **D** = structure). Structure **D** contains a carboxylic acid. **4 PTS**



ANSWER: