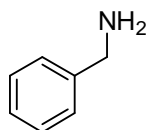
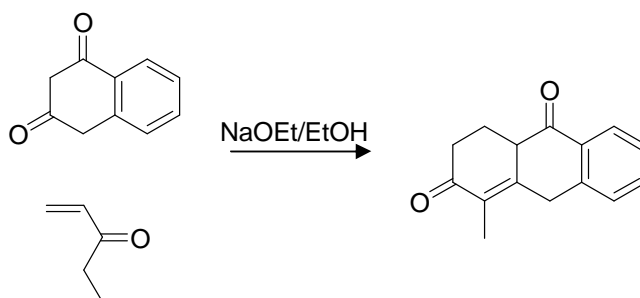
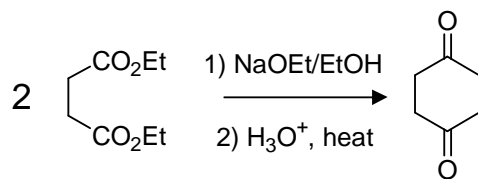


List all the ways you can think of to make the following compound.

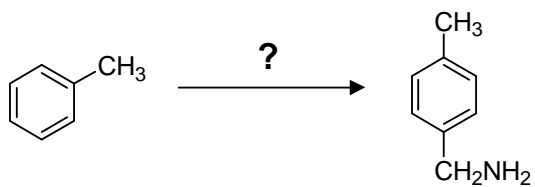
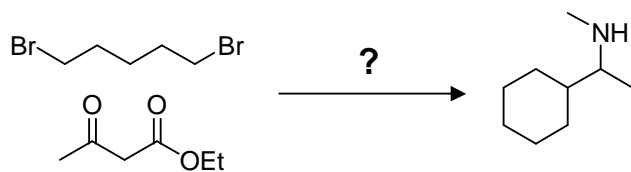


Draw a detailed mechanism for the Claisen condensation between two molecules of ethyl phenylacetate. Clearly indicate which steps are reversible and which are essentially irreversible.

Draw detailed mechanisms for the following reactions:



Propose efficient synthetic routes for the following transformations



(please use a diazonium salt along the way)