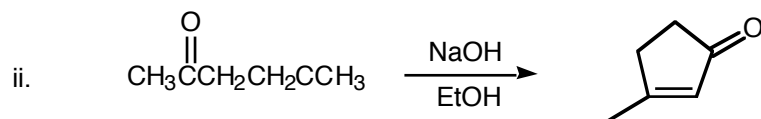
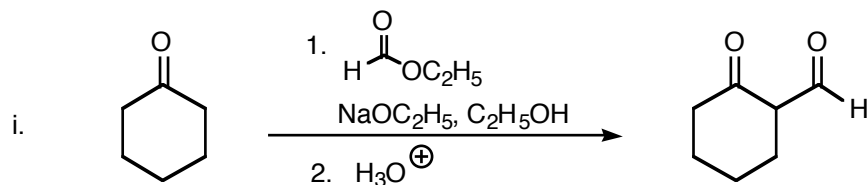


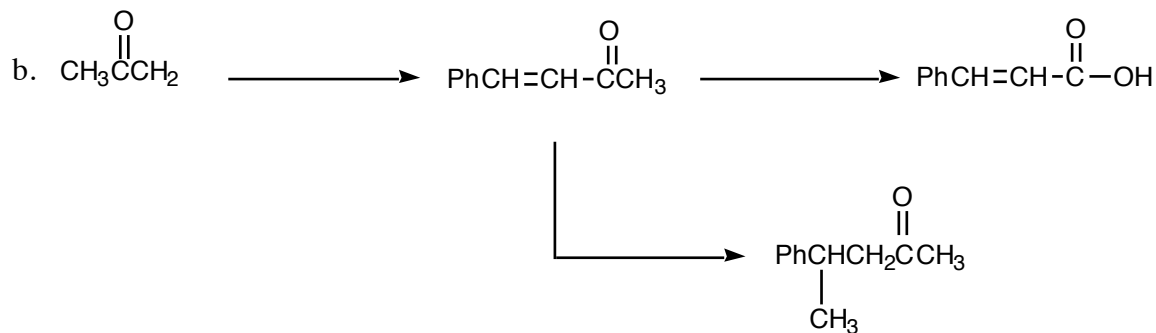
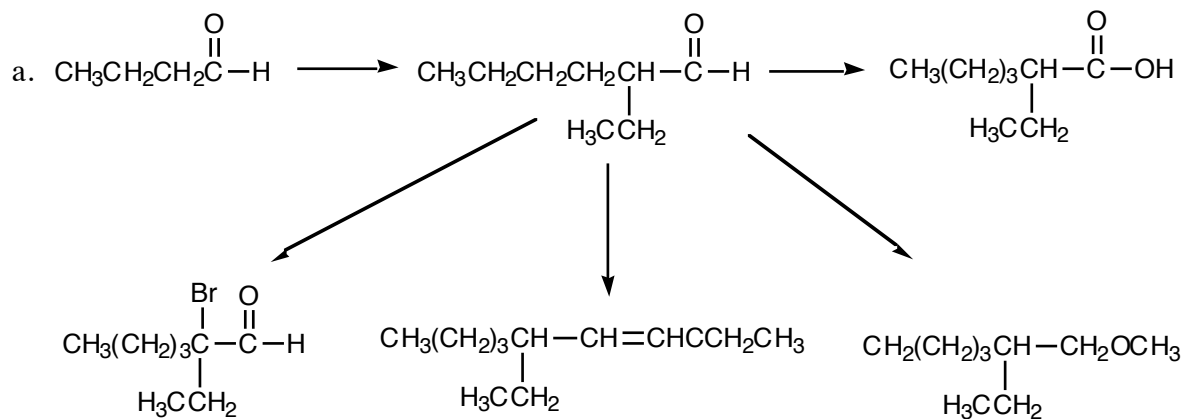
## WORKSHOP 18

*Enolates and Condensation Reactions*

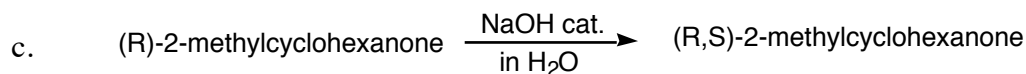
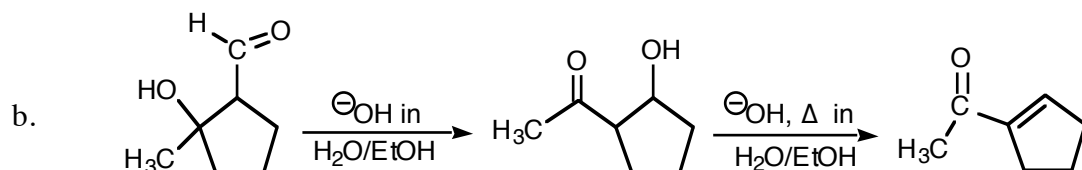
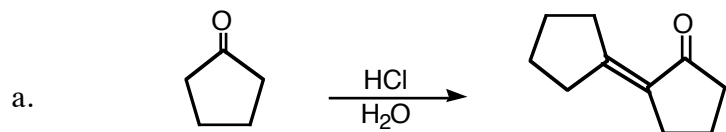
1. Provide a plausible mechanism for the following reactions. Provide important resonance structures for delocalized intermediates.



2. Show how to carry out the following chemical conversions using any necessary organic and inorganic reagents. More than one synthetic step may be required for a synthetic transformation.



3. Give a reasonable mechanism for each of the following reactions, clearly showing all important intermediates and resonance structures, and using curved arrows to show movement of electron pairs.



4. Give reasonable mechanistic pathways that account for the formation of two products under different reaction conditions. Explain why each is the preferred product under the reaction conditions specified.

