

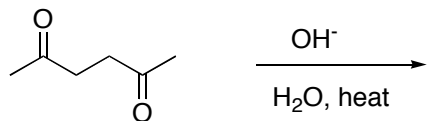
CHEMISTRY 172Q

WORKSHOP 7

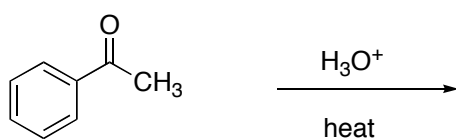
MARCH 5, 2007

1. Predict the product and provide a plausible mechanism for each transformation. Indicate important resonance structures for delocalized intermediates.

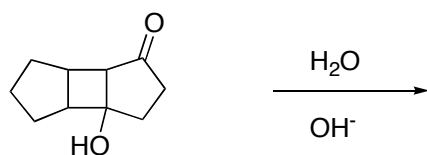
a.



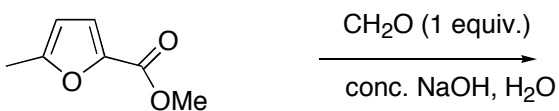
b.



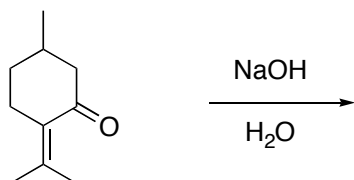
c.



d.

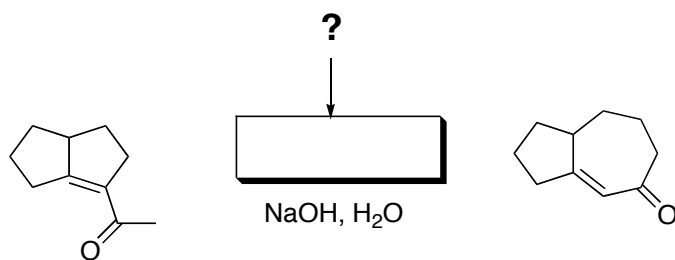


e.



Like acid-catalyzed additions to carbonyl compounds, condensation reactions are reversible processes. What drives each reaction above?

2.



- Provide a mechanism for the transformation.
- Which way does the equilibrium lie? Explain.

3. a. Propose three different syntheses of the molecule below, using a different aldol condensation in each one.
- b. Evaluate each approach for efficiency: what byproducts might you observe in each case?

