

Enolates, Problem Set #7

Due in lecture on 4/2/2003

No late homeworks accepted

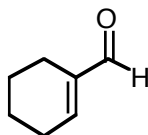
Only the additional problems need to be turned in.

❖ Read Chapter 22

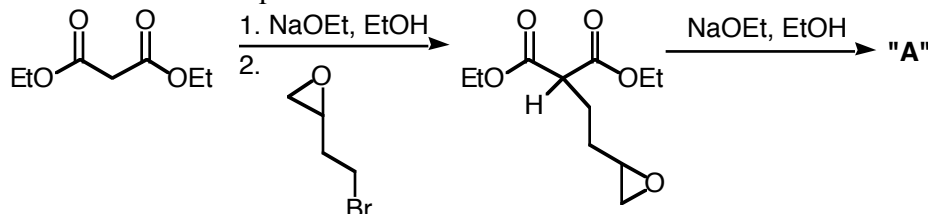
Exercises:❖ McMurry 5th Ed Problems: 22.20, 22.21, 22.22, 22.24, 22.25, 22.26a,b,d, 22.27, 22.29, 22.32, 22.33, 22.43, 22.46.

❖ Additional Problems:

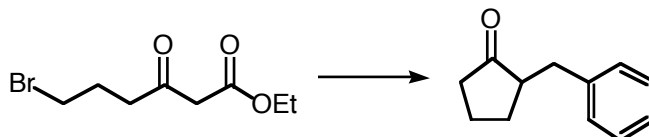
1. Identify the acidic protons in the following molecule. Write reasonable resonance structures for the anion.



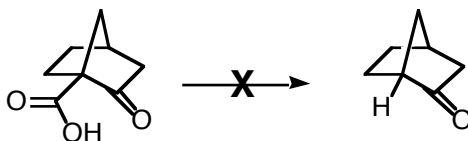
2. Write a mechanism for the equations that follows. What is "A"?



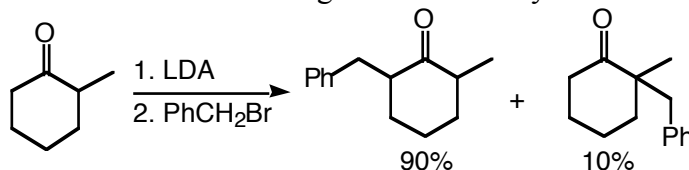
3. What reagents would you use to accomplish the following transformation. More than one step is required.



4. Write a mechanism for the decarboxylation of the following bicyclic structure. Why does this reaction not occur?

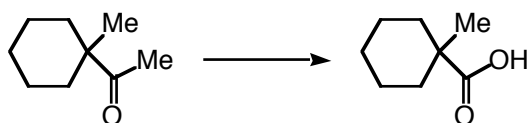


5. Explain the product ratio from the following enolization/alkylation.

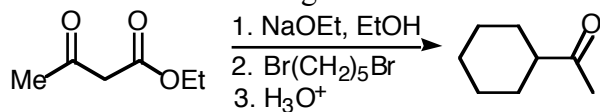


6. Show what reagents you would use to accomplish the following. Write a stepwise

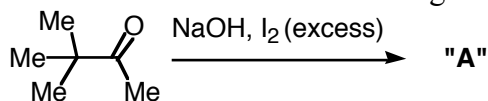
mechanism.



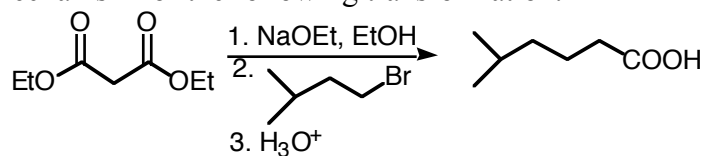
7. Write a stepwise mechanism for the following transformation.



8. What is "A"? Write a stepwise mechanism for the following transformation.



9. Write a stepwise mechanism for the following transformation.



10. Write a detailed synthesis using either the acetoacetic ester or malonate ester sequence to construct the following molecules.

