

Name: Answer Key

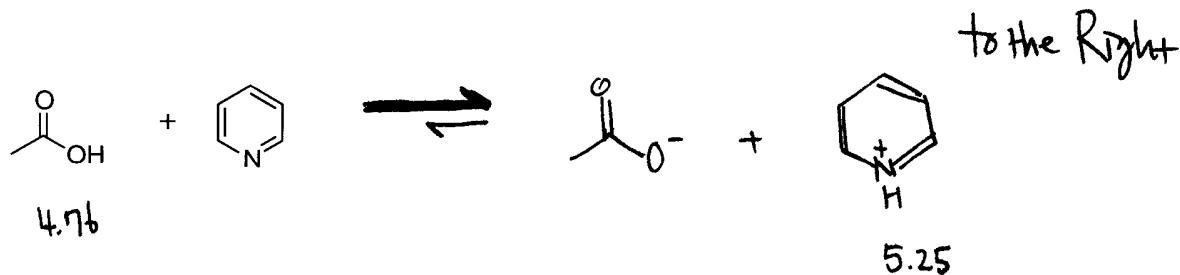
January 21, 2011

SID: \_\_\_\_\_  
Chem 30C

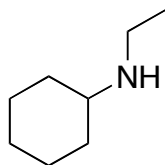
Discussion Section: 9:00am 11:00am 12:00pm  
(please circle)

Quiz 1

1. Complete the following acid-base reaction and predict the direction of equilibrium (to the right or to the left) for each. (Acetic acid:  $pK_a = 4.76$ , Pyridinium cation:  $pK_a = 5.21$ )

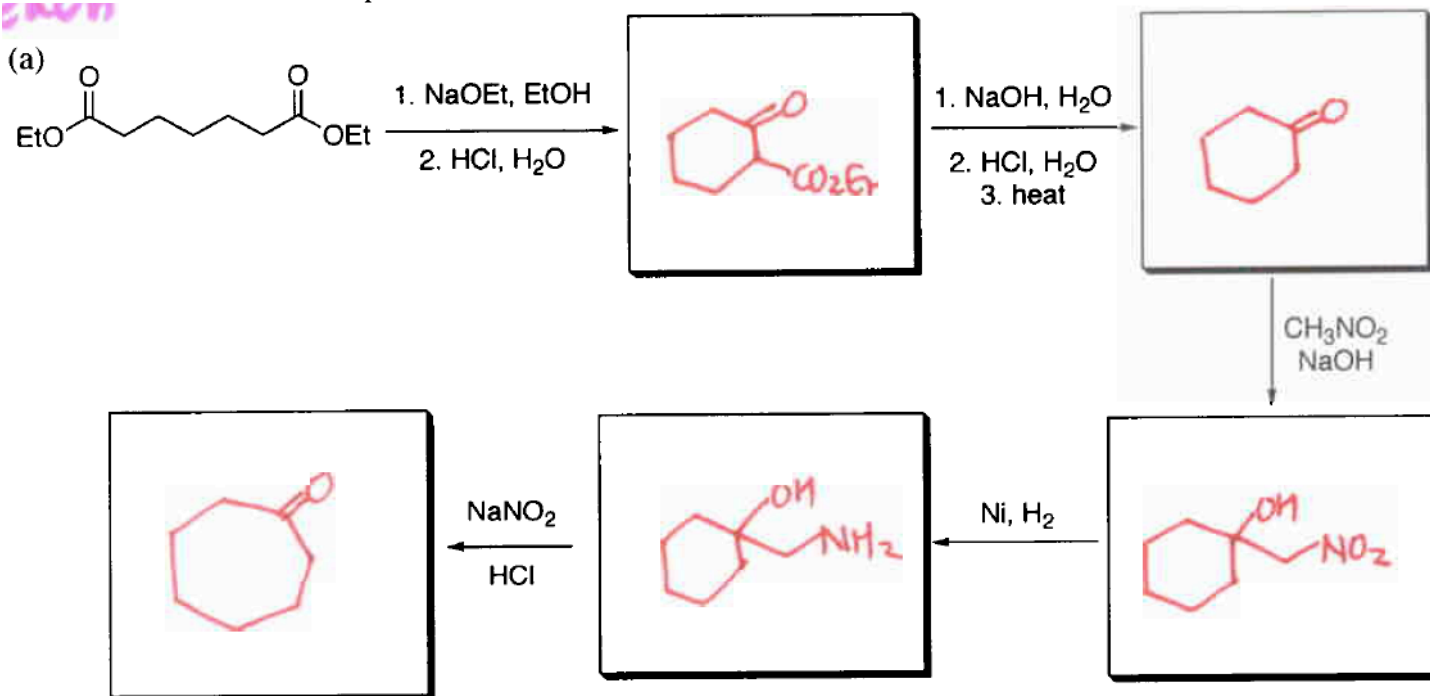


2. Name the following using common nomenclature:

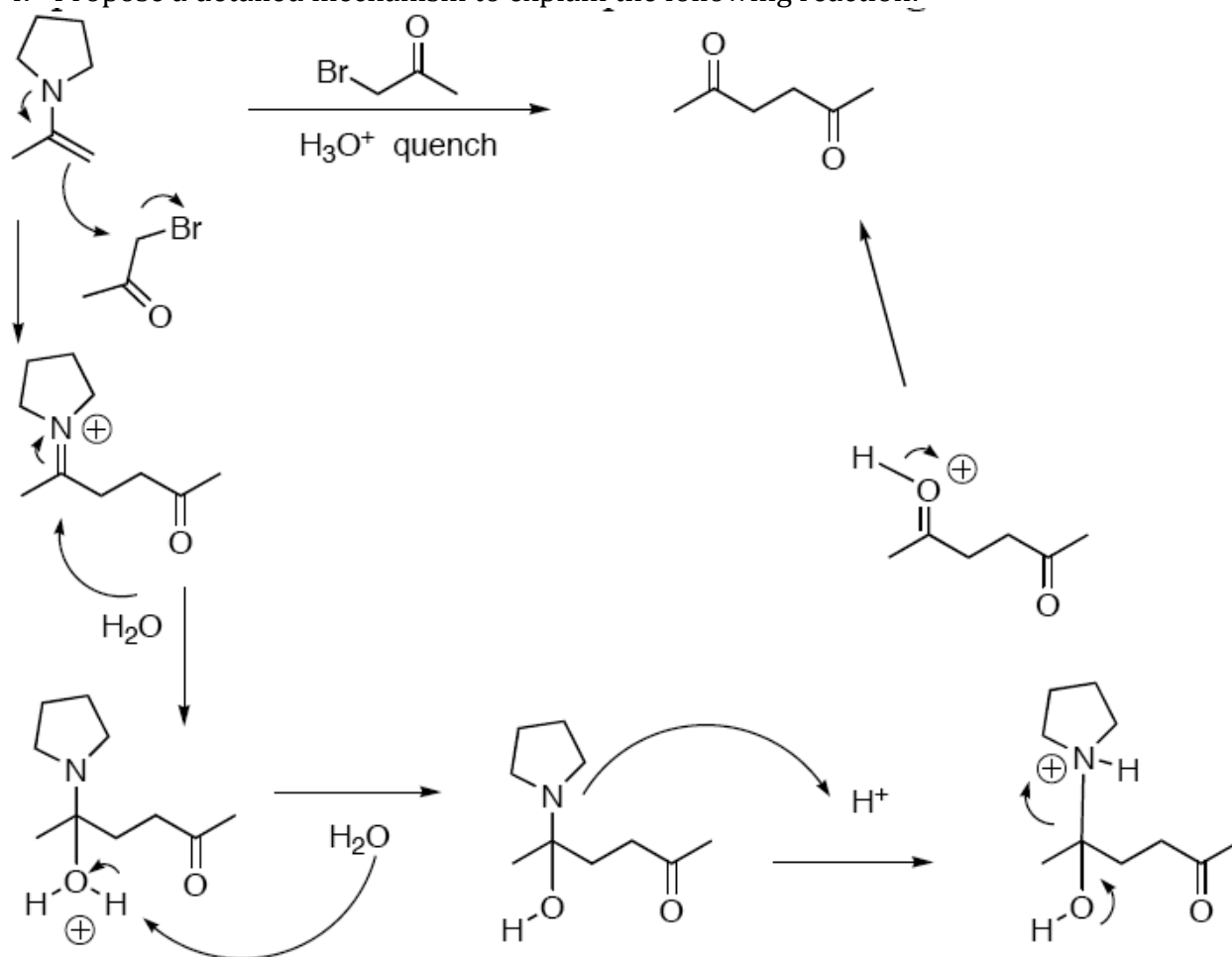


Cyclohexylethylamine

3. Provide the compound for each transformation:



4. Propose a detailed mechanism to explain the following reaction:



5. Devise a reasonable synthesis for the following compounds from reagents you are familiar with and the starting material provided.

