Amines and Carbohydrates, Problem Set #9

Due in lecture on 4/30/2003 No late homeworks accepted

Only the additional problems need to be turned in.

Read Chapters 24 and 25. Section 24.8 was covered earlier in the semester. It will not be on the 4th hour exam but will be covered on the final exam. Sections 25.9–25.12 will not be covered.

Excercises:

- ★ McMurry 5th Ed Problems Ch.24: 24.34, 24.35, 24.36, 24.37, 24.38, 24.41, 24.43, 24.51, 24.52, 24.59, 24.60. Ch. 25: 25.34, 25.36, 25.37, 25.54, Write out all of the reactions and reasoning of the Fisher Glucose Proof.
- ❖ Additional Problems:
- 1. What is "A"?

2. What is "A"?

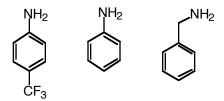
3. Show to synthesize methamphetamine can be synthesized from the ketone shown below. If some of the starting material remained, how would you separate it from the product?

Methamphetamine

4. What is "A"? Write a mechanism for its formation.

5. Write a mechanism for the following transformation.

6. Rank the basicity of the following compounds. Explain your ranking.



7. What are A and B?

$$\rightarrow$$
 "A" $\stackrel{\text{LiAlH}_4, \text{H}_20}{\longrightarrow}$ "B"

8. What is A? Write a mechanism of its formation.

9. What is A? Write a mechanism of its formation.

10. What is the stereochemical relationship between the following compounds.

11. How would you achieve the following transformation (more than one step is required)?

12. Write a mechanism for the following equilibrium.

Write the products for the following transformation.