Exam #3

April 22, 2011

Name <u>key</u>

This is an open-book, open notes exam.

1. (20 points) The reactions shown would not proceed as indicated. Draw the actual products. You do <u>not</u> need to draw mechanisms.

2. (20 points) Circle the expected product. Explain your answer in detail. Stereochemistry is important!

3. (20 points) Outline a synthesis of **A** using only starting materials that contribute three or fewer carbons to the final product, and a monosubstituted benzene that contributes seven or fewer carbons to the final product.

4. (20 points) Deduce the structure of **C**, and draw an arrow-pushing mechanism for its formation.

5. (20 points) Draw the letters on the product where they belong. Make a list of bonds formed and bonds broken, and draw the mechanism in detail.