

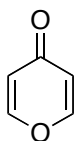
## Organic Chemistry

### Homework

Name: \_\_\_\_\_

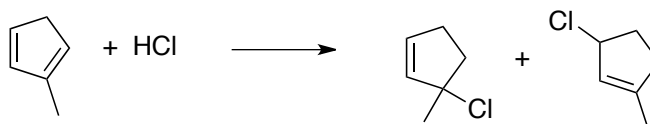
Date: Nov. 4, 2015

1. Fill in the blanks below:

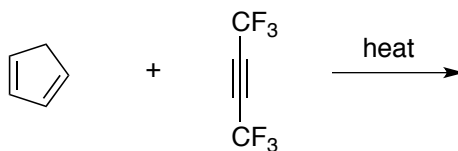


# pi electrons \_\_\_\_\_ p orbital on every atom in ring (yes/no) \_\_\_\_\_ aromatic (yes/no) \_\_\_\_\_

2. Which of the two molecules shown do you expect to be the major product formed by the following reaction at 25 °C (circle the major product)?



3. Draw the product of the following Diels-Alder reaction.



4. Show how the compound below can be synthesized from benzene and any needed reagents. Assume you can separate ortho and para isomers, if both are formed in any step. You do not need to show mechanisms.

