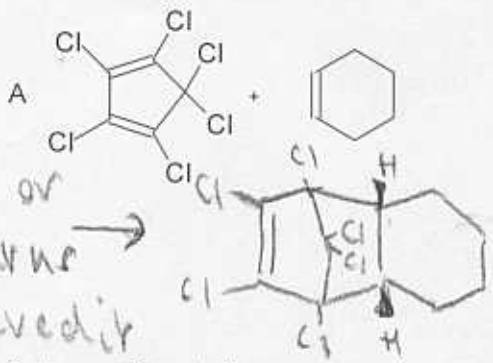
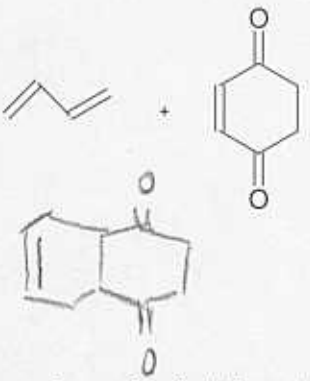
Quiz 3 Chem 233-01 Your name KEY

2/9/09 Student ID#_____

1. Show valid structural formulas for the products of the following Diels-Alder reactions (4 pts)



endo or exo same full credit



2. Is reaction A above a normal or reverse electron demand reaction? What about reaction B? (2 pts)

A - reverse B - normal

3. Circle any CORRECT statements (4 pts)

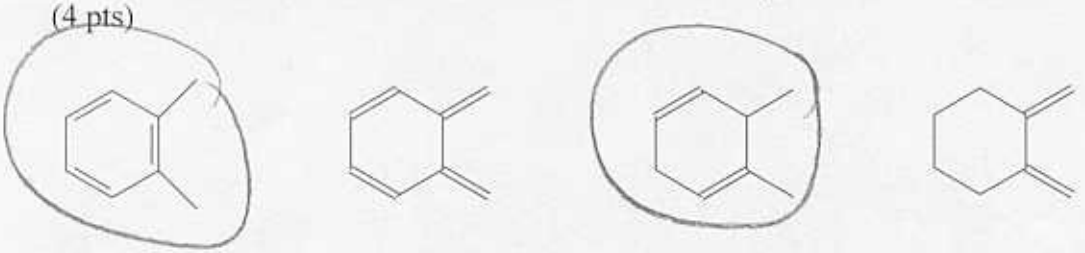
a. Diels-Alder reactions work best if both the diene and the dienophile are electron-rich.

(b.) All Diels-Alder adducts must contain a six-membered ring.

c. Diels-Alder reactions work best if both the diene and the dienophile are electron-depleted.

d. The xylene used in last week's experiment acts as a catalyst.

4. Circle all that are UNABLE to serve as the diene component in Diels-Alder reactions. (4 pts)



5. Show a valid structural formula for *ortho*-xylene! (1 pts)