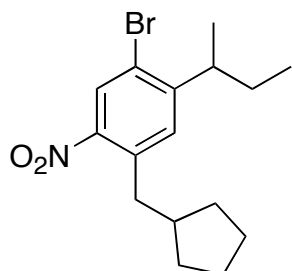


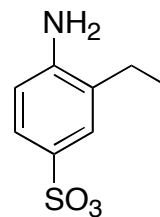
CHEMISTRY 172Q
WORKSHOP 14 (REVIEW)
APRIL 30, 2007

SYNTHESIS PROBLEMS INVENTED BY QUEST STUDENTS

1. PROPOSE SYNTHESSES OF THE COMPOUNDS BELOW, STARTING WITH BENZENE. YOU MAY SEPARATE ORTHO AND PARA ISOMERS. THE SYNTHESIS SHOULD BE 5 STEPS OR FEWER!



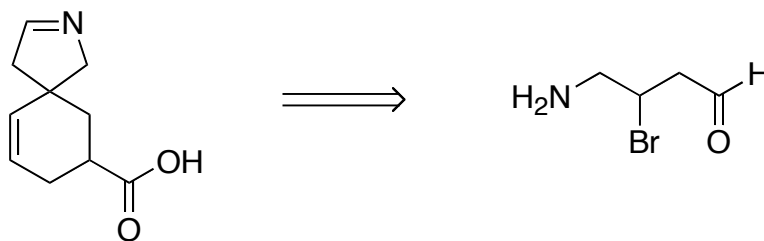
SARAH WESSEL



LINDSAY BRONNENKANT

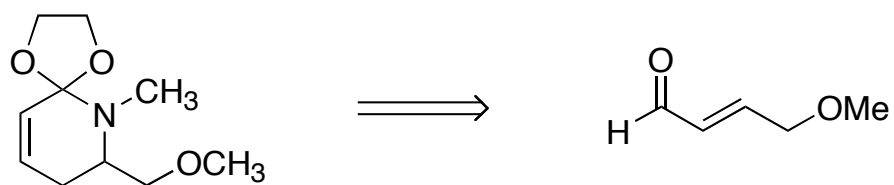
2. PROPOSE SYNTHESSES OF EACH COMPOUND BELOW, STARTING FROM THE PRECURSOR(S) GIVEN. USE ANY REAGENTS OR CARBON SOURCES YOU FIND NECESSARY. INDICATE STEPS IN WHICH A MIXTURE OF PRODUCTS IS EXPECTED, AND SHOW ALL PRODUCTS YOU EXPECT TO OBSERVE.

a.



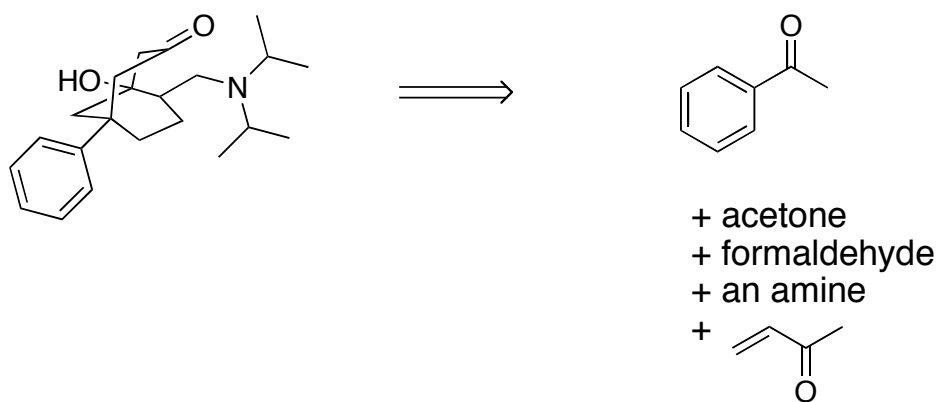
ANANYA RAY

b.



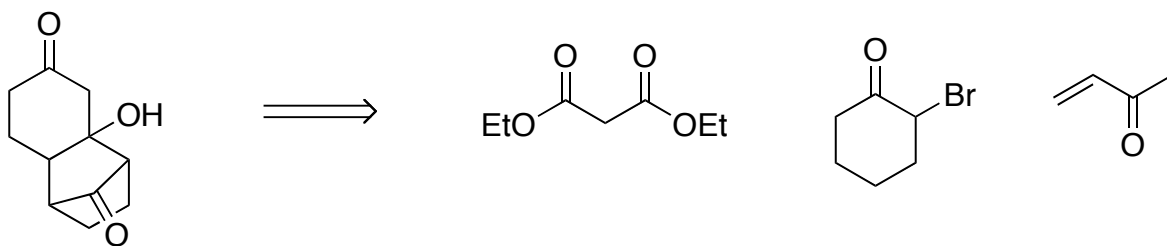
NIRANJANI THUPPAL (SLIGHT MODIFICATION BY AJF)

C.



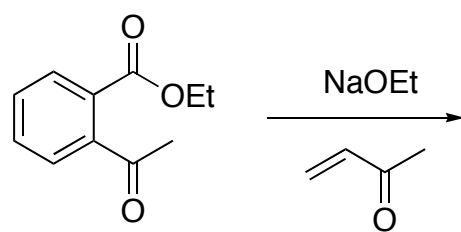
BRIAN LINDLEY (SLIGHT MODIFICATION BY AJF)

d.



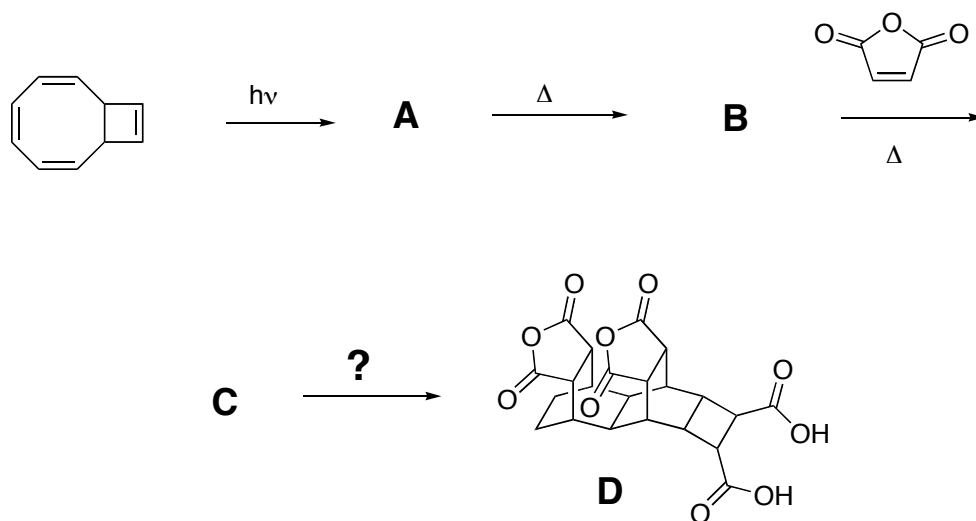
SASHA SOKOLSKY (SLIGHT MODIFICATION BY AJF)

3. PREDICT THE PRODUCT OF THE REACTION BELOW, AND GIVE A MECHANISM FOR THE TRANSFORMATION.



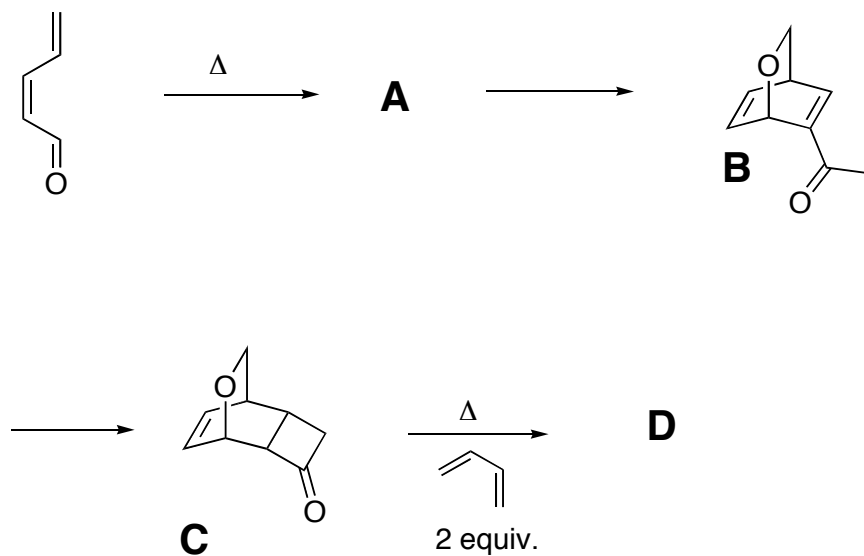
JIA CARROLL

4. GIVE STRUCTURES FOR COMPOUNDS **A-C**, REACTION CONDITIONS FOR THE CONVERSION OF **C** TO **D**, AND A MECHANISM FOR EACH TRANSFORMATION. POINT OUT ANY REACTIONS THAT WOULD GIVE A MIXTURE OF PRODUCTS.



BRIAN LINDLEY

5. FOR THE FOLLOWING SYNTHETIC SEQUENCE, GIVE:
- THE STRUCTURE OF **A**
 - REACTION CONDITIONS FOR THE TRANSFORMATION OF **A** TO **B**
 - REACTION CONDITIONS FOR THE TRANSFORMATION OF **B** TO **C**,
 - THE STRUCTURE OF **D**.



MATT GOLDR