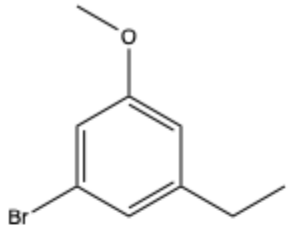
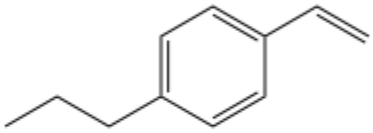
CHEM 2300 Session 4

1. Name or draw the following molecules



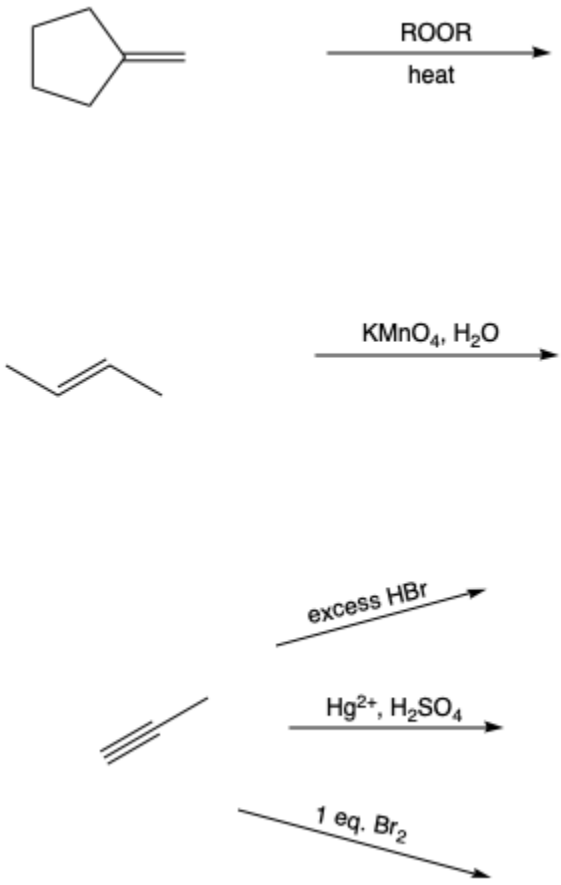


m-xylene

3-bromo-2-nitrophenol

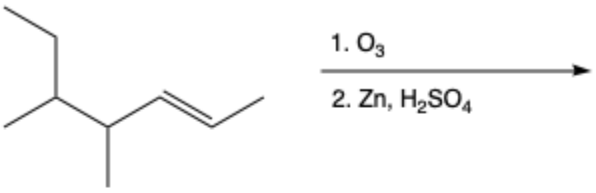
2. What is the difference between a phenyl and a benzyl group?

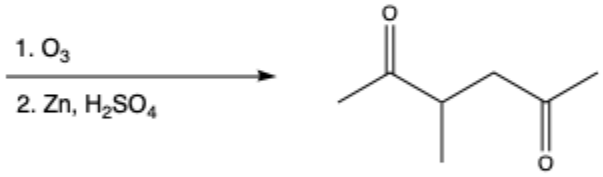
3. Draw the major product for the following reactions (for question 1 draw the polymer with 3 monomers and remember that radical stability follows carbocation stability). If you see an acid, assume there is water in solution.

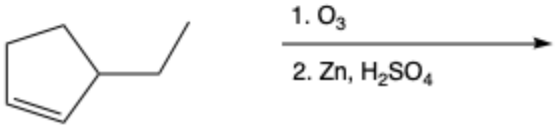


5. Why might we use Lindlar's catalyst instead of Pt during a hydrogenation of an alkyne?

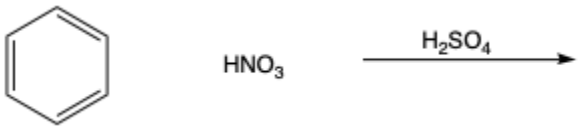
6. Draw either the product or the reagent for the following ozonolysis reactions.

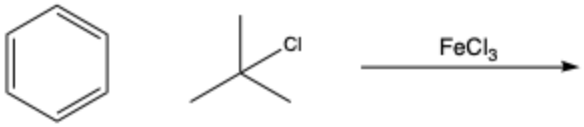


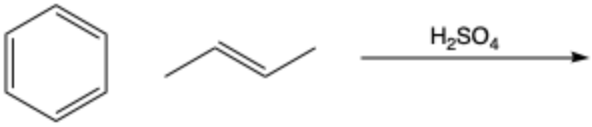




7. Draw the mechanism for the formation and the addition of the following strong electrophiles to a benzene ring.







8. Why do normal alkene reactions not occur on benzene rings?