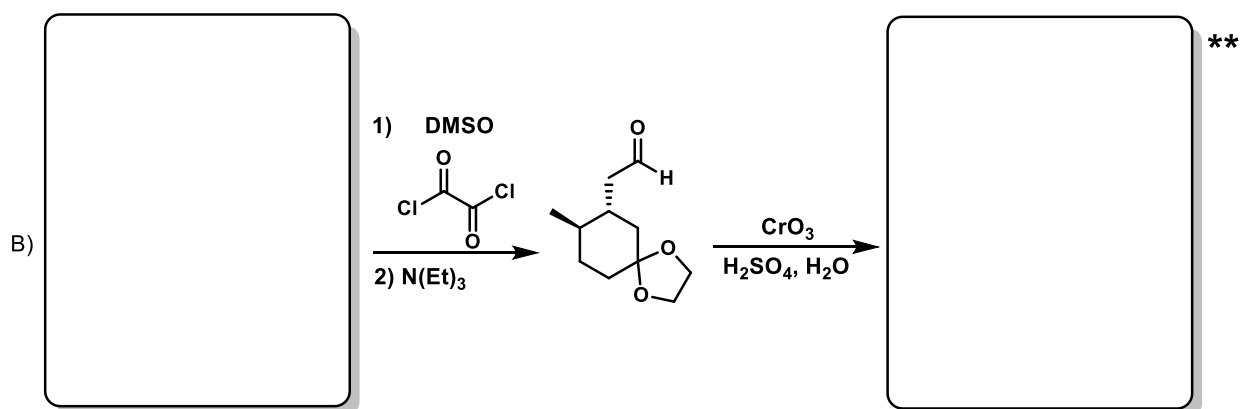
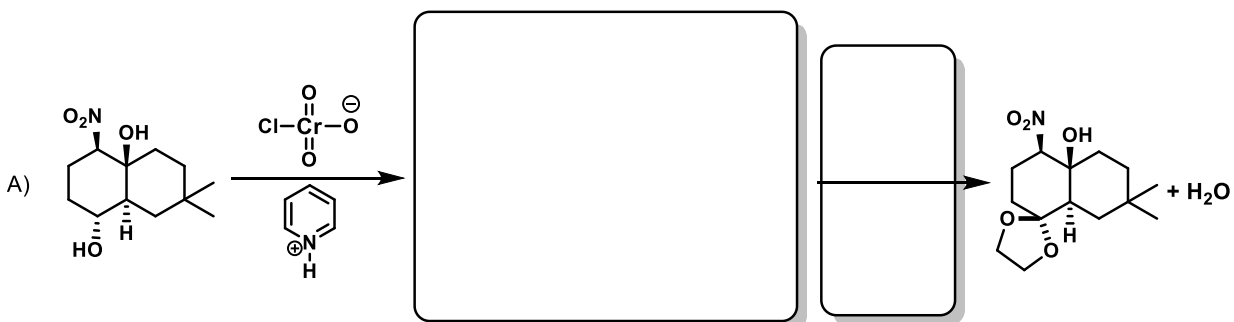
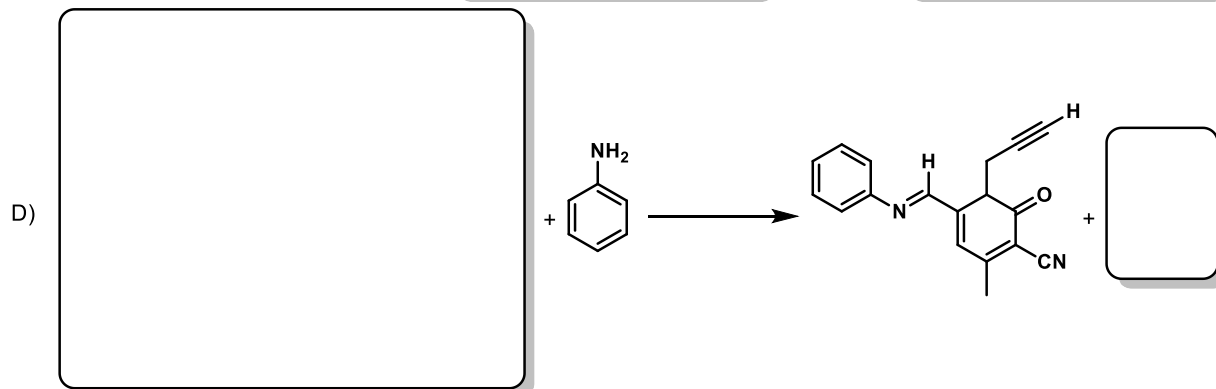
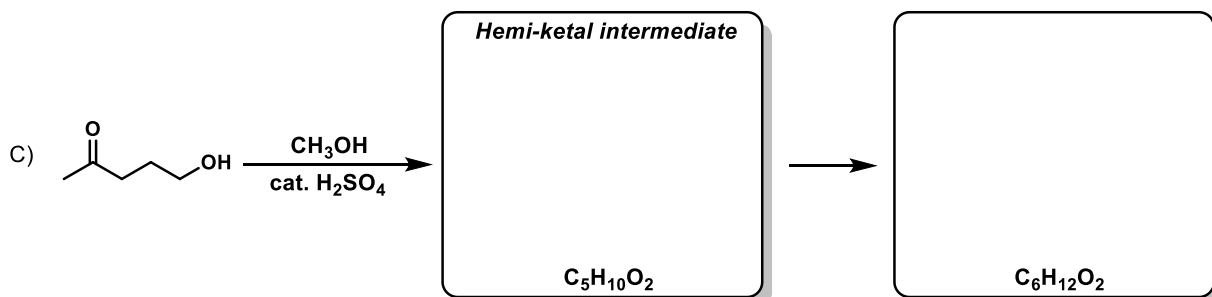


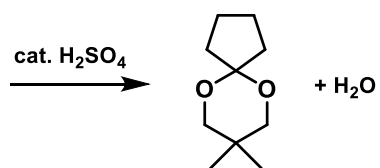
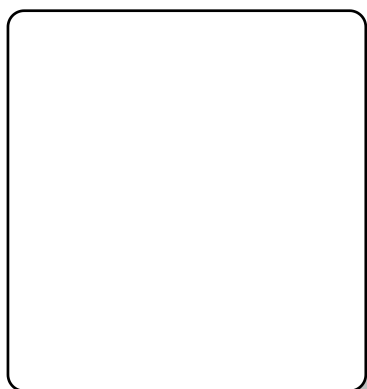
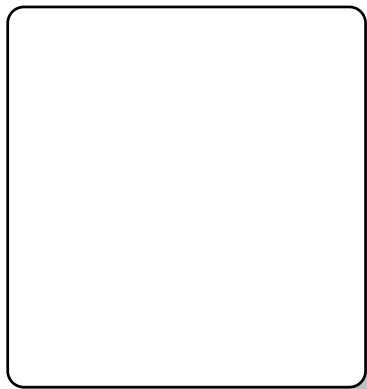
1. **Quick Synthesis.** In the boxes, fill in the correct reagent or product for the reactions given.



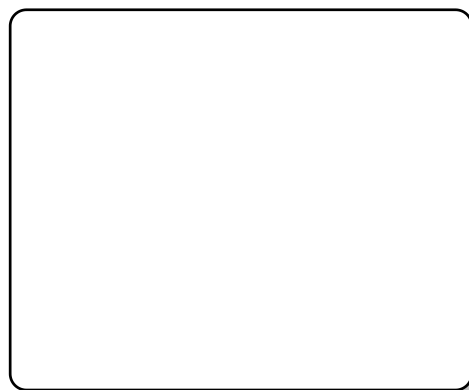
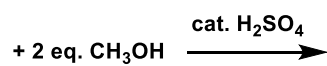
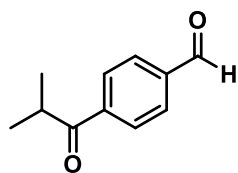
Note: under these conditions, two different reactions take place, resulting in a compound with the formula  $C_9H_{12}O_3$



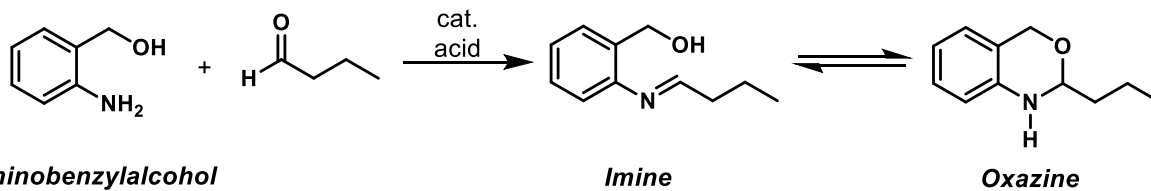
E)



F)



2. **Mechanism.** 2-aminobenzylalcohol reacts with aldehydes to give oxazines. The oxazine is in equilibrium with a structural isomer, an imine. Provide a mechanism for imine formation, followed by how the oxazine is generated from the imine intermediate.



***Imine Formation Mechanism***

***Oxazine Formation Mechanism***