4A) (8 pts) Provide a complete mechanism for the reaction shown below.

Pay close attention to details, including lone pairs, formal charges and the use of curved arrows.

$$\begin{array}{c} \text{NaOH} \\ \text{H}_2\text{O} \\ \text{heat} \end{array} \qquad \text{HO} \begin{array}{c} \text{O} \\ \text{ONa} \end{array}$$

4B) (12 pts) Name the following compounds according to the IUPAC rules. Remember to designate stereochemistry, when appropriate.