Fall 2006 Homework #4

due: 10 a.m. Mon. Oct 2nd

1. (10 points) Label each pair as "diastereomers", "enantiomers", or "same".

2. (10 points) Which product will be formed? Why?

$$\begin{array}{c} \text{Br} & \text{Cl} & \text{OH} \\ \hline \\ \text{O} & \text{OH} \\ \hline \\ \text{O} & \text{PH = 3} \\ \end{array}$$

At pH=3, only the dichloro acid will be ionized, so it is the nucleophile. The reaction proceeds with inversion at the center that has the Br.

3. (10 points) Draw an arrow-pushing mechanism for the following transformation.