## Quiz #3

## 1. (5 points)

Draw the mechanism of the following reaction, using the curved-arrow notation to indicate the reorganization of electron density. Denote **all** intermediates, lone pairs, nonzero formal charges, countercharges, and reversibility or nonreversibility. Finally, state clearly why the product **1** is enantiomerically pure.

## 2. (5 points)

Draw the structure of the expected major organic product for the following reaction sequence.