## Organic II (Quiz 3A)

Name:

**Recitation Instructor:** 

The following quiz will start 5 minutes into the class and last 30 minutes. Good luck!

1. Show the product of the following reactions (4 points)

$$\begin{array}{c|c}
 & H_2SO_4 \\
\hline
 & SO_3
\end{array}$$

2. Show the reagents necessary for the following reaction (4 points)

3. Show the mechanism for the following transformation (6 points)

$$\begin{array}{c|c} & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & \\ & & \\$$

4. Show a synthesis for the following interconversion (6 points)