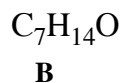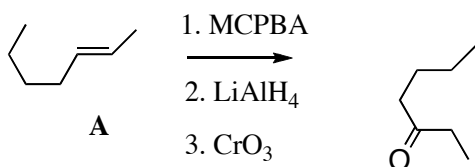Fall 2006
Homework #9
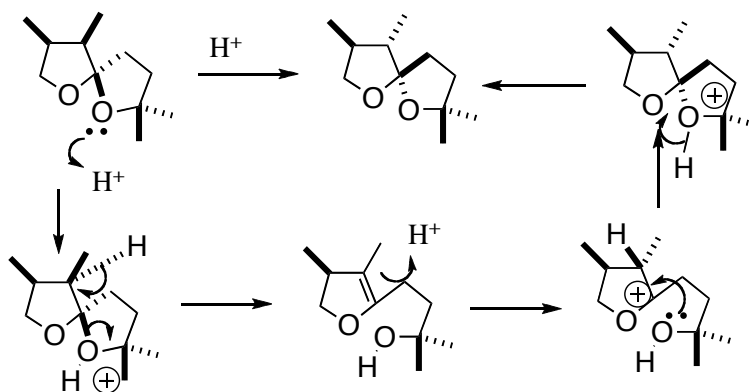due: 10 a.m. Monday, November 13th

1. (10 points) Deduce the structure of **B**, and fill in the missing reagents.

$C_7H_{14}O$

B

1. MCPBA

2. LiAlH$_4$

A

3. CrO$_3$

^{13}C NMR:	^{1}H NMR:
7.9, q	0.9, t, J = 7.3 Hz, 3H
13.8, q	1.05, t, J = 7.7 Hz, 3H
22.5, t	1.4, m. 2H
26.2, t	1.6, m, 2H
35.9, t	2.38, q, J = 7.7 Hz, 2H
42.1, t	2.44, t, J = 7.4 Hz, 2H
211.5, s	

2. (10 points) Draw an arrow-pushing mechanism for the following transformation:

3. Outline a synthetic route to **D**. Show all reagents. You may use any starting material that incorporates three or fewer carbons in the final product. Absolute configuration does not matter, but you must show how to control relative configuration.