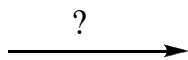
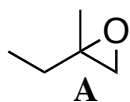
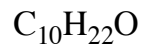


Fall 2008

Homework #5

due: 10 a.m. Mon. Oct 13th

1. (10 points) Deduce the structure of **B**, and fill in the reagent.**B** ^{13}C NMR:

8.2, q

21.6, t

22.6, q (2)

26.4, q

28.0, d

34.3, t

39.6, t

41.6, t

72.9, s

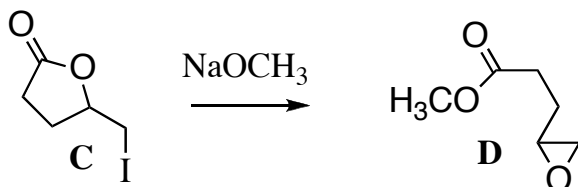
 1H NMR:0.89, d, $J=7.6$ Hz, 6H0.95, t, $J = 7.3$ Hz, 3H

1.15, s, 3H

1.2-1.6, m, 9H

2.44, bs, 1H (exchanges)

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

3. (10 points) Outline a synthesis of **E**. You may use any material that contributes three or fewer carbons to the final product.