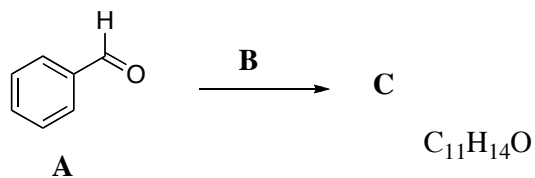


Fall 2008

Homework #7

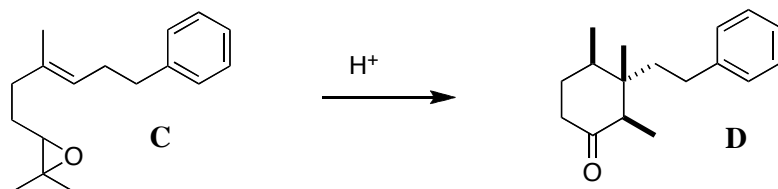
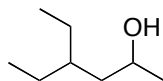
due: 10 a.m. Mon. Nov. 3rd

1. (10 points) Draw the structures of **B** and of **C**.**¹³C NMR:**

16.9, q
 46.7, d
 78.3, d
 116.7, t
 126.8, d (2)
 127.5, d
 128.1, d (2)
 140.6, d
 142.4, s

¹H NMR:

0.85, d, J=6.8 Hz, 3H
 2.29, bs, 1H (exchanges)
 2.45, ddq, J=7.2, 7.8, 6.8 Hz, 1H
 4.33, d, J=7.8 Hz, 1H
 5.15, d, J=10.2 Hz, 1H
 5.21, d, J=15.9 Hz, 1H
 5.80, ddd, J=15.9, 10.2, 7.2 Hz, 1H
 7.3, m, 5H

2. (10 points) Draw an arrow-pushing mechanism for the transformation of **C** to **D**.3. (10 points) Write a synthesis route to **E**. You may use any starting material that contributes three or fewer carbons to the final product.**E**