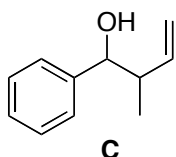
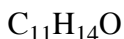
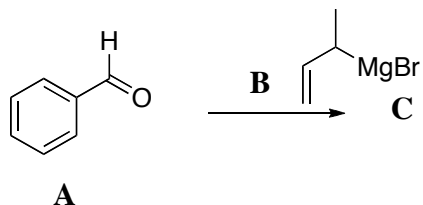


Fall 2008

Homework #7

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

1. (10 points) Draw the structures of **B** and of **C**. ^{13}C 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

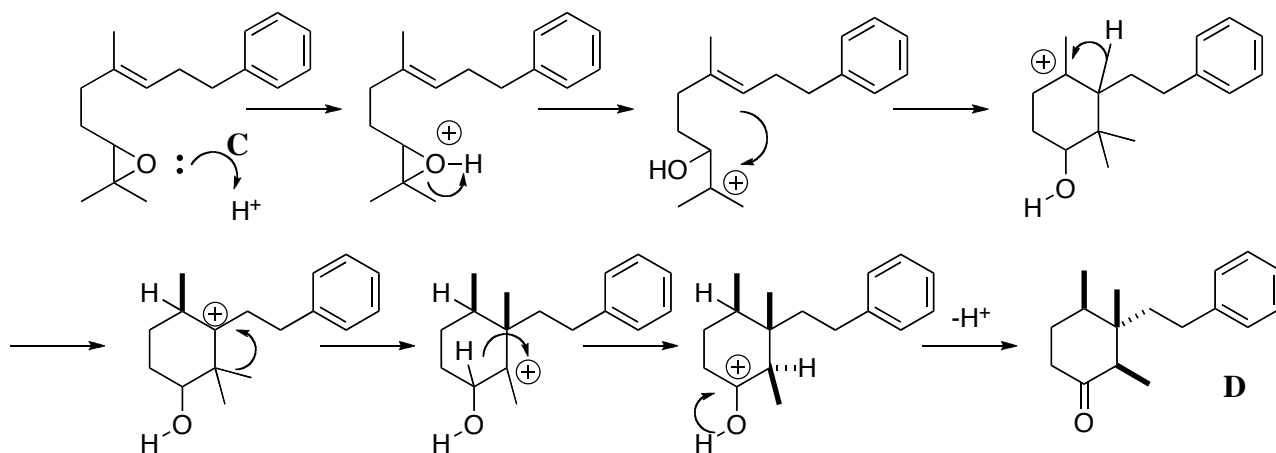
142.4, s

 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, 1H4.33, d, $J=7.8$ Hz, 1H5.15, d, $J=10.2$ Hz, 1H5.21, d, $J=15.9$ Hz, 1H5.80, 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.