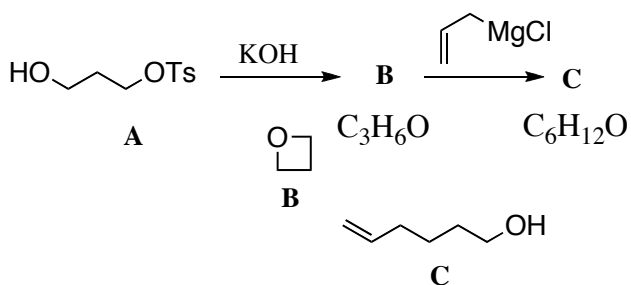


Fall 2006

Homework #6

due: 10 a.m. Mon. Oct16th

1. (10 points) Draw structures for **B** and **C**.<sup>13</sup>C NMR:

138.6, d

114.5, t

62.6, t

33.5, t

32.2, t

25.1, t

<sup>1</sup>H NMR:

1.55, m, 2H

1.68, m, 2H

2.10, dt, J = 6.7, 7.3 Hz, 2H

2.30, bs, 1H (exchanges)

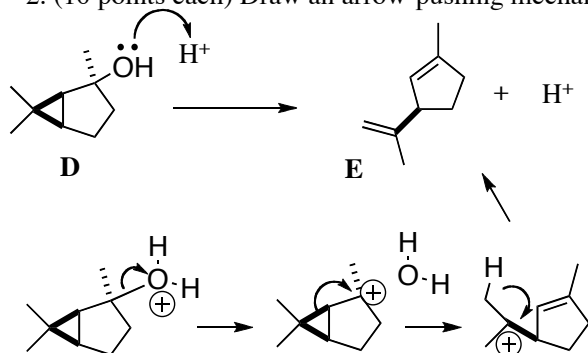
3.62, t, J = 7.5 Hz, 2H

4.95, d, J = 11.2 Hz, 1H

5.03, d, J = 15.9 Hz, 1H

5.81, ddt, J = 11.2, 15.9, 6.7 Hz, 1H

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

3. (10 points) Show the synthesis steps to convert **F** into **G**.