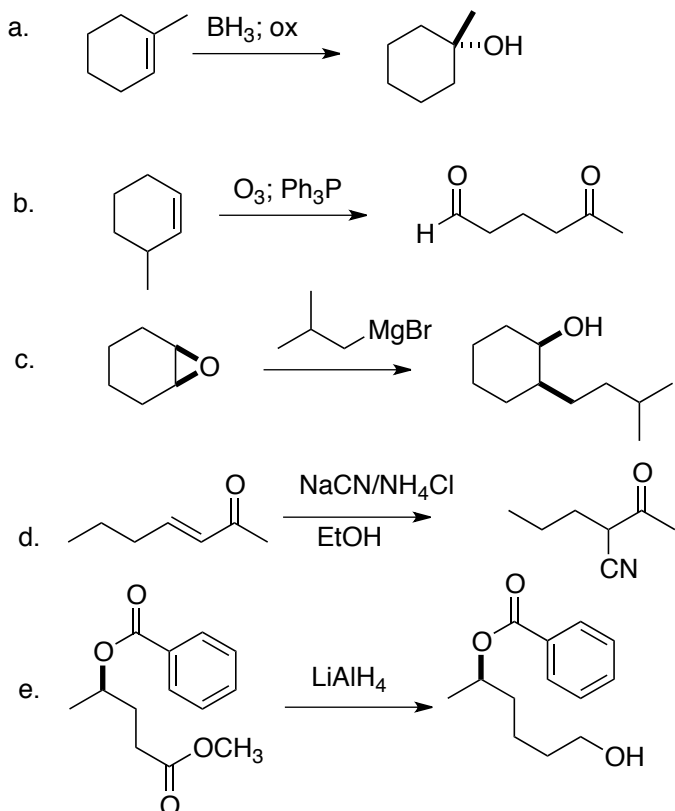
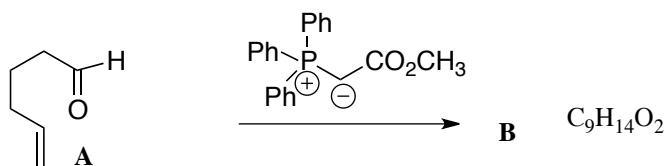


1. (20 points) The reactions would not proceed as indicate. Please draw the actual product, showing stereochemistry clearly.



2. (10 points) Draw the structure of **B**, and the mechanism for its formation from **A**.



¹³C NMR:

166.5, s
 150.7, d
 131.3, d
 119.0, d
 116.4, t
 50.6, q
 31.7, t
 29.3, t
 26.4, t

¹H NMR:

6.14, dt, J=11.5, 7.5 Hz, 1H
 5.68, d, J=11.5 Hz, 1H
 5.77, m, 1H
 5.01, d, J=10.5, 1H
 4.89, d, J=15.8 Hz, 1H
 3.80, s, 3H
 2.5, m, 2H
 2.2, m, 2H
 1.7, m, 2H