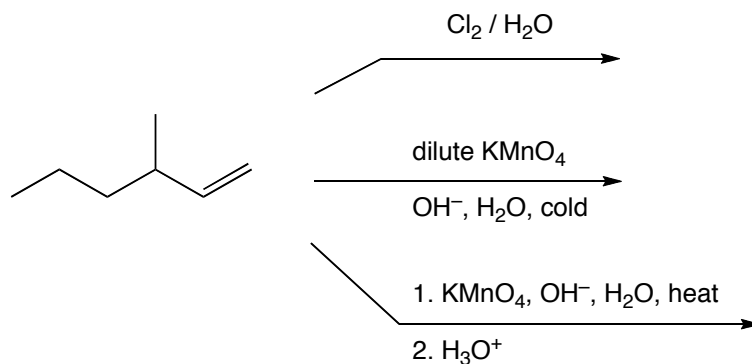


## Recitation Week 13

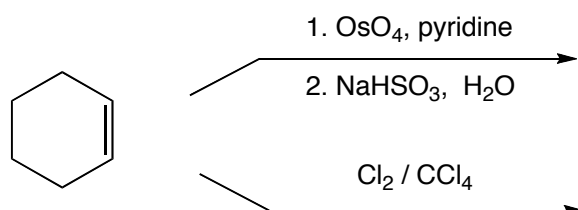
4/17/13

1. Give the major organic products of these reactions:

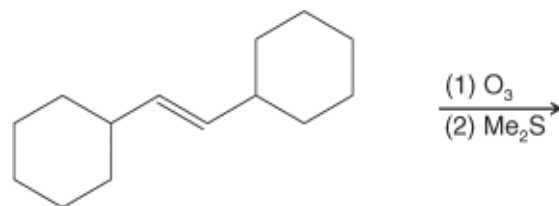
(a)



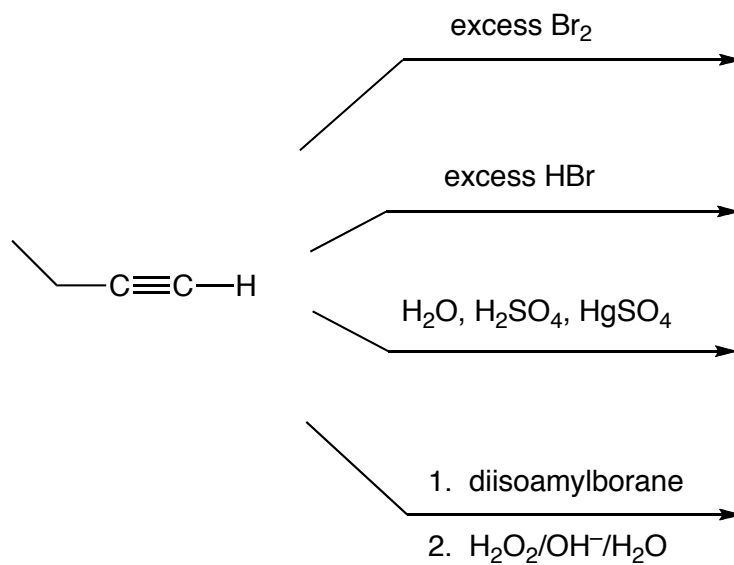
(b)



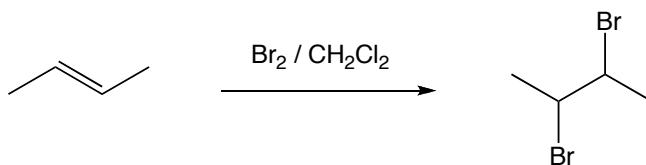
(c)



(d)



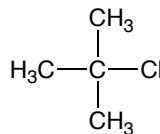
2. Draw the mechanism for the following reaction:



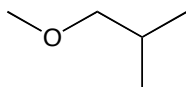
3. How many signals would you expect to observe in the  $^1\text{H}$  NMR spectrum of each of these compounds? For each signal, predict its approximate chemical shift, and give its relative integration (if there is more than one signal).



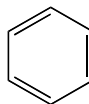
(d)



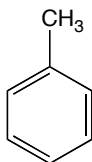
(e)



(f)



(g)



(h)

