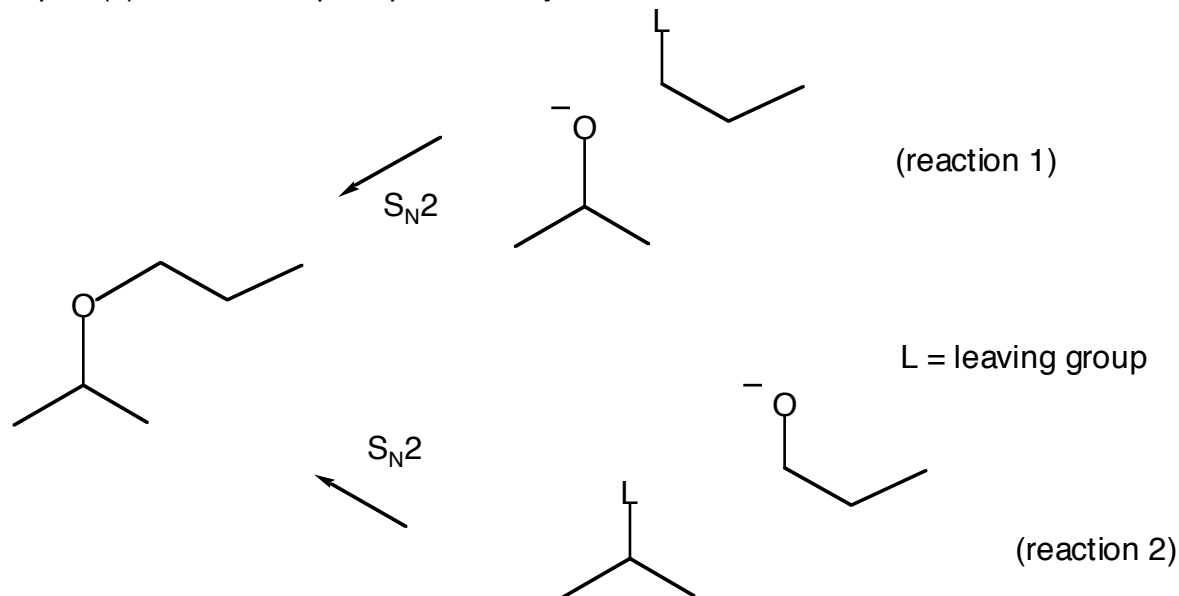


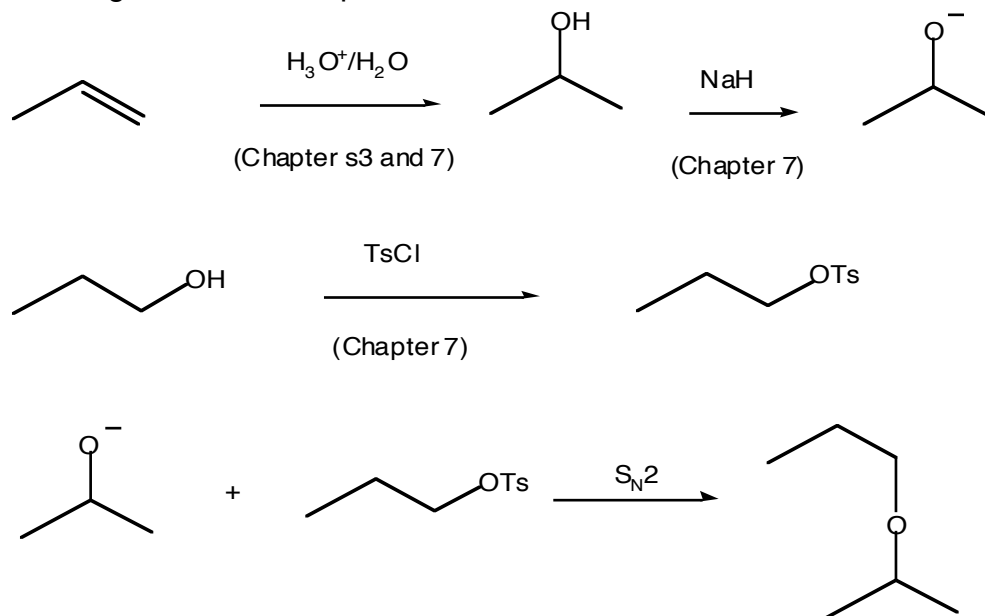
Answers to Problem 58, Chemistry 301X - 2006

Remember to **ALWAYS, ALWAYS** do synthesis problems backward.

In part (a) there are, in principle, two ways to do this one.



Reaction (1) is far better as the required  $S_N2$  reaction will be much much faster than the one in Reaction 2 (why????). So we'll work that one out. We need to make the alkoxide and transform propene into a molecule with a leaving group on the primary carbon. Both reactions come right out of the chapter.



Synthesis of the second molecule admits no choices similar to those available in the first part (Why not????).

So we must do it this way:

