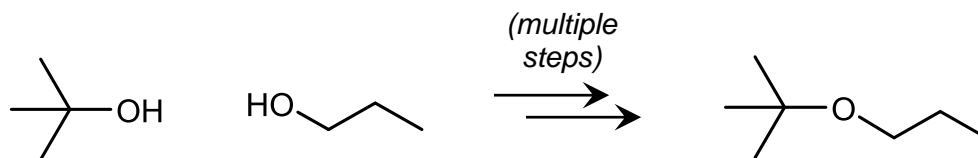


Chemistry 2301

In-Class Exercise: Planning Multistep Organic Syntheses

1. Chemists specializing in organic synthesis plot routes to make complex molecules from simple starting materials, using their knowledge of organic transformations to get from molecule "A" to molecule "B". Pretend that you are a synthetic organic chemist at a chemical company, and that you need to transform the starting materials below into the given product. How would you do it? Propose a multistep synthesis, giving a recipe of reagents and reaction conditions for each synthetic step.

Note: You do not need to "push electrons"—this is not a mechanism question.



2. Let's try a harder one:

