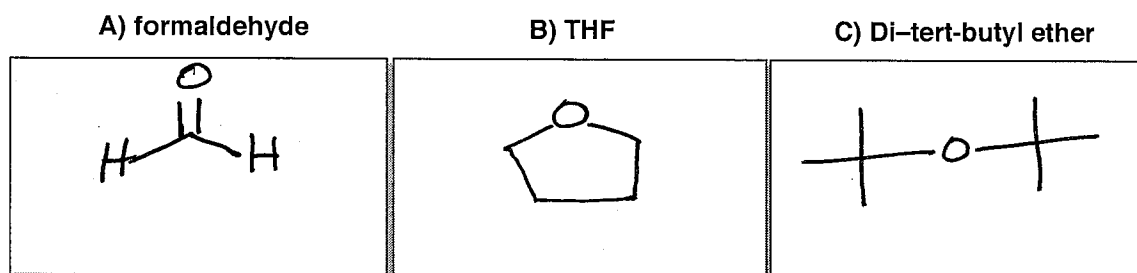


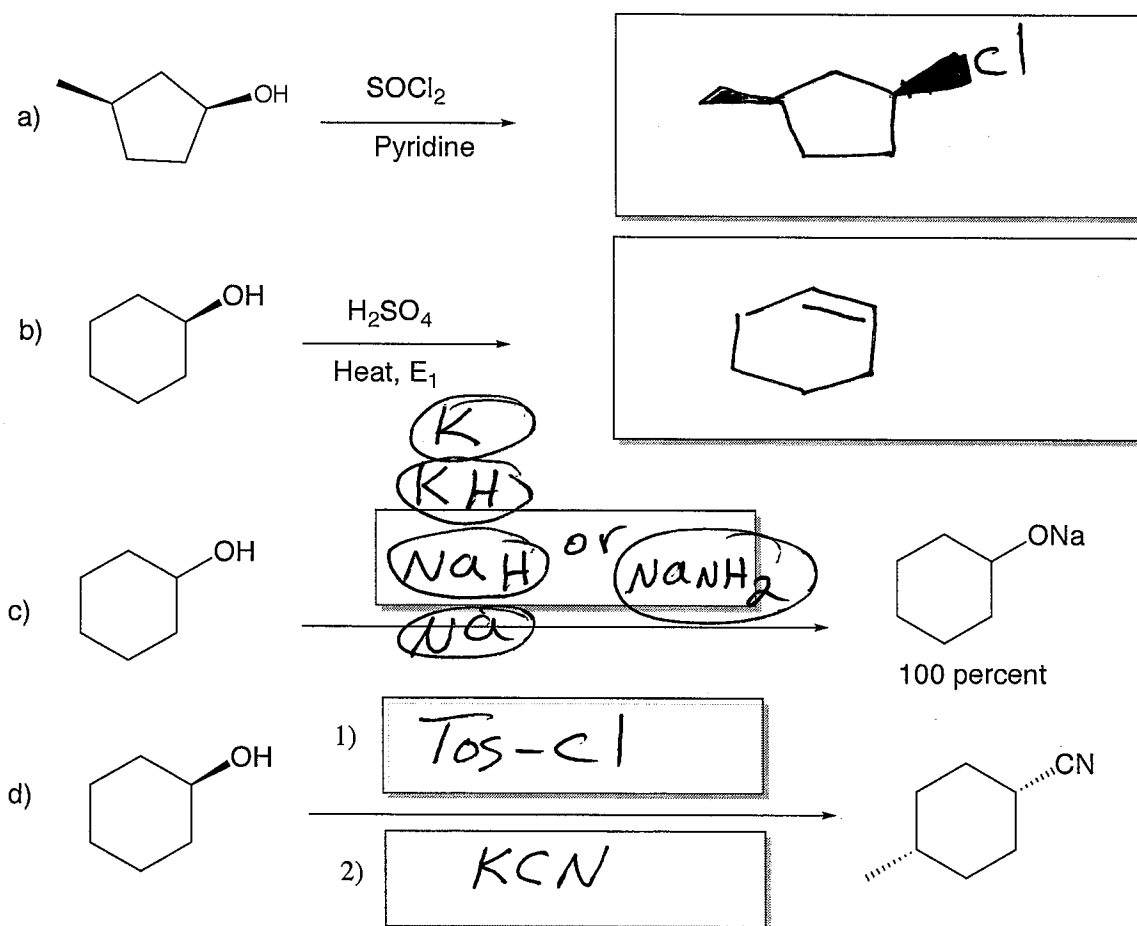
Key

(26 Points)

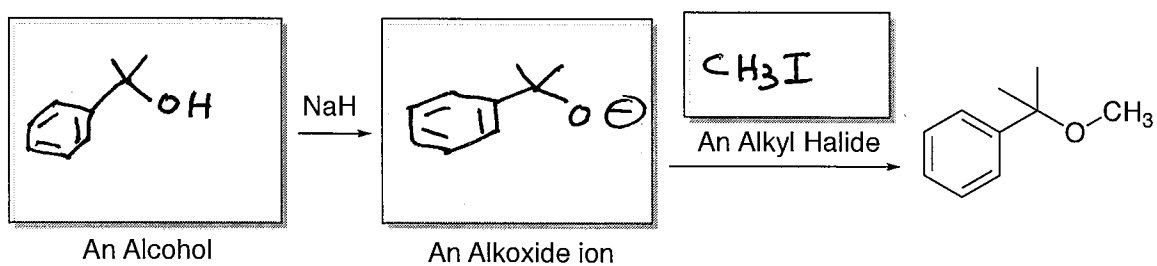
1. (6 Points) Give the correct structure for each of the following compounds.



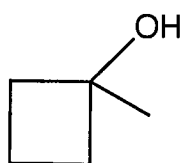
2. (8 Points, 2 Pts. Each) Complete the following chemical transformations by filling the boxes appropriately with reactant, reagents, or products.



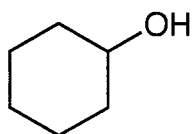
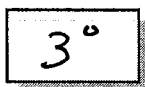
3. (6 Points) Complete the following Williamson Ether Synthesis by filling the boxes appropriately.



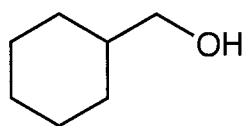
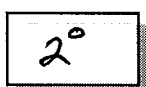
4. (4 Pts) Label each of the following alcohols as primary (1°), secondary (2°), or tertiary (3°).



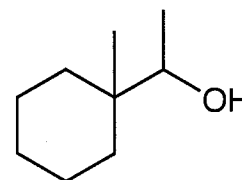
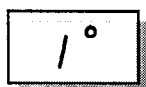
A



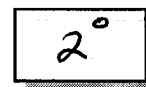
B



C



D



5. (2 Points) provide an example of an alkyl lithium compound.

