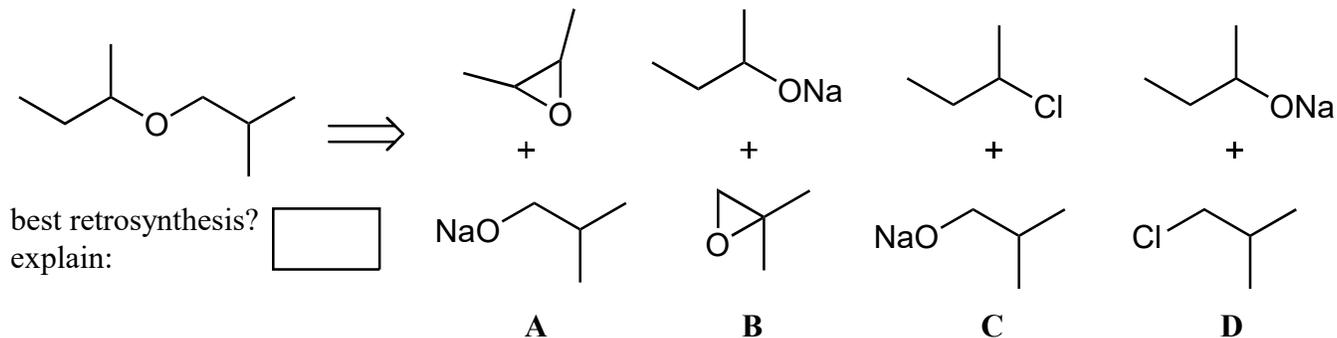
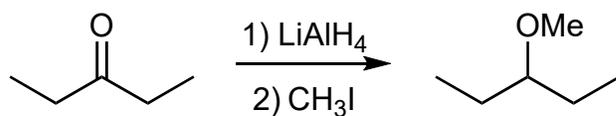


3A) (6 pts) Consider the retrosynthesis of the following target molecule. Select the best retrosynthesis and thoroughly explain your choice. Why is it better than the other three choices? **No explain = no credit.**



3B) (6 pts) Provide a complete mechanism for the following reaction sequence. Pay close attention to details, including lone pairs, formal charges, and the use of curved arrows.



mechanism: