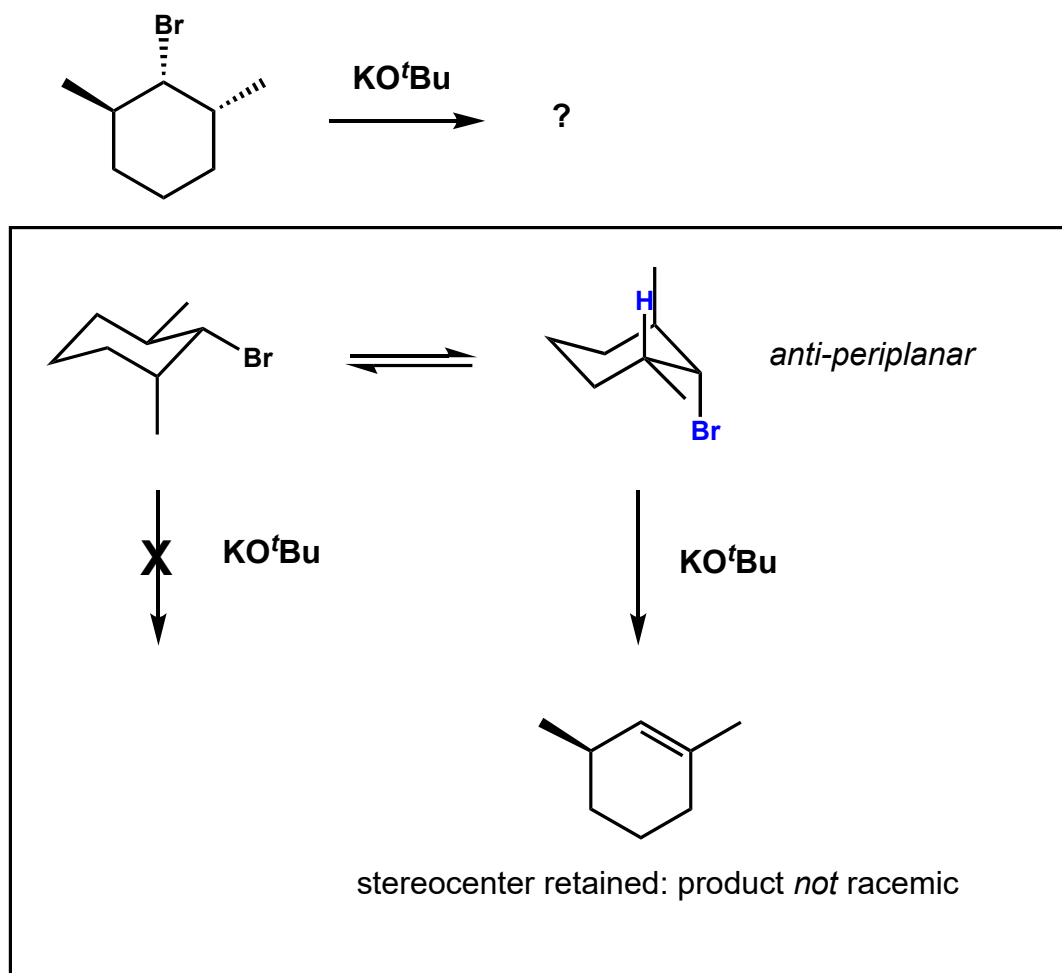
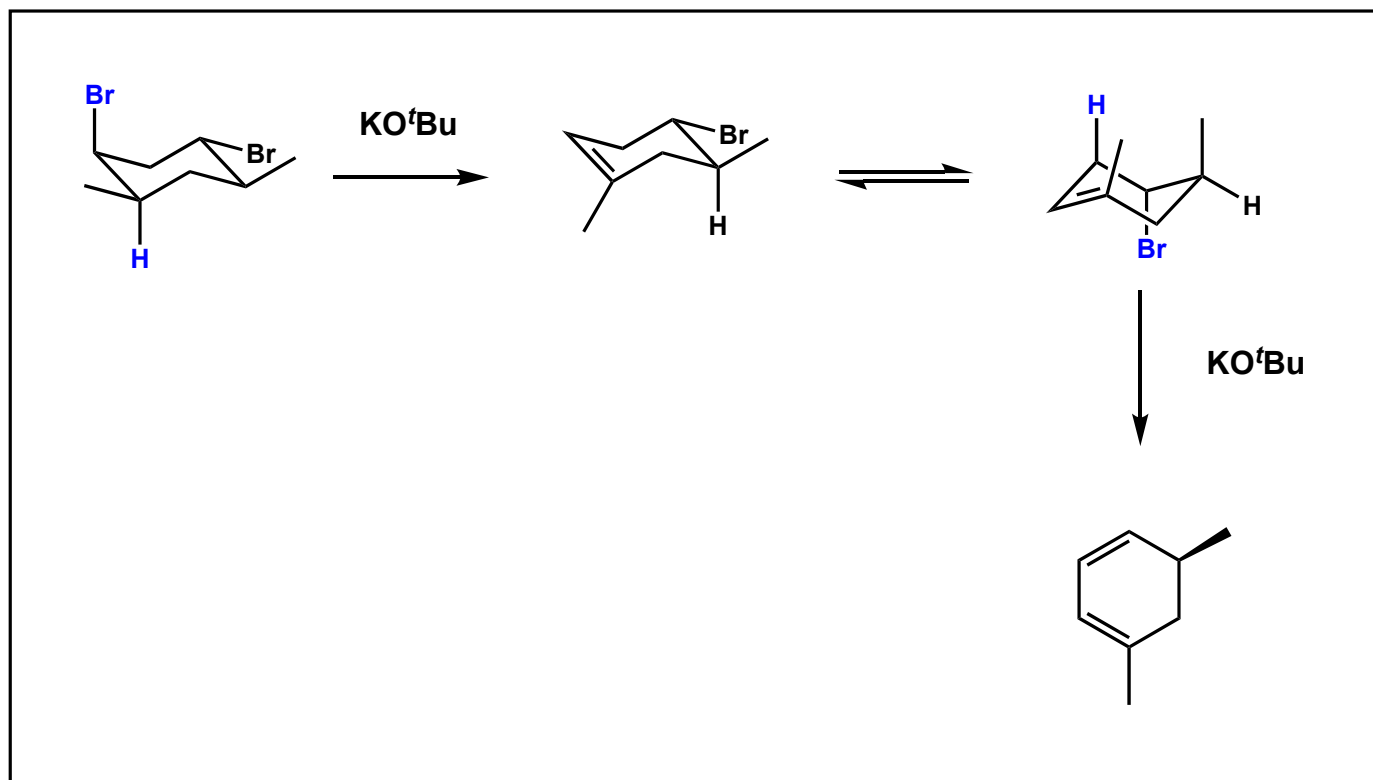
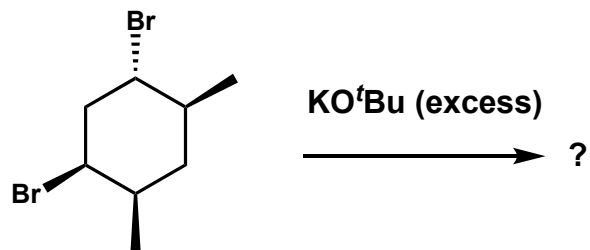


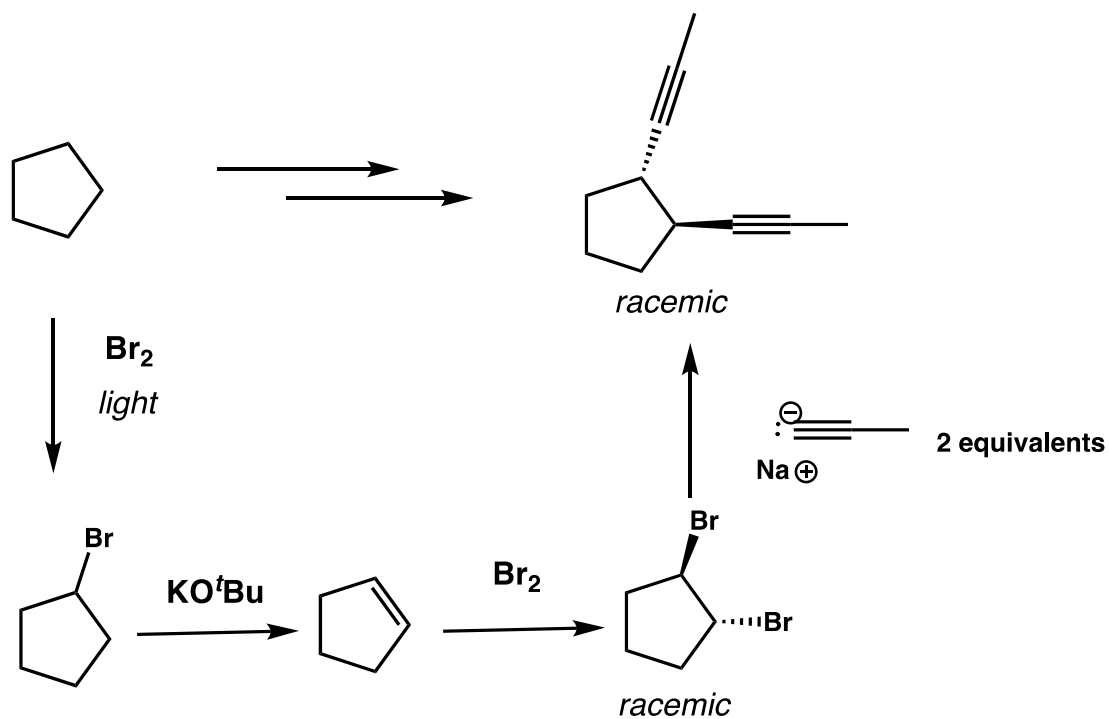
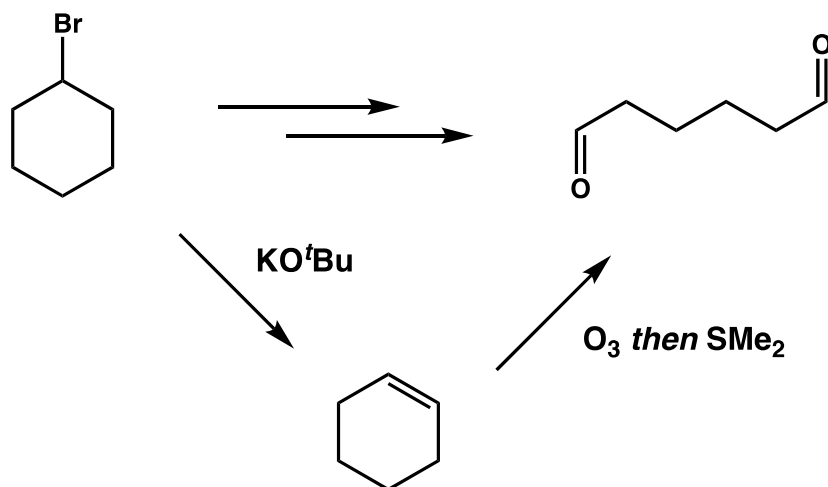
Eliminations of Halogenated Cyclohexanes

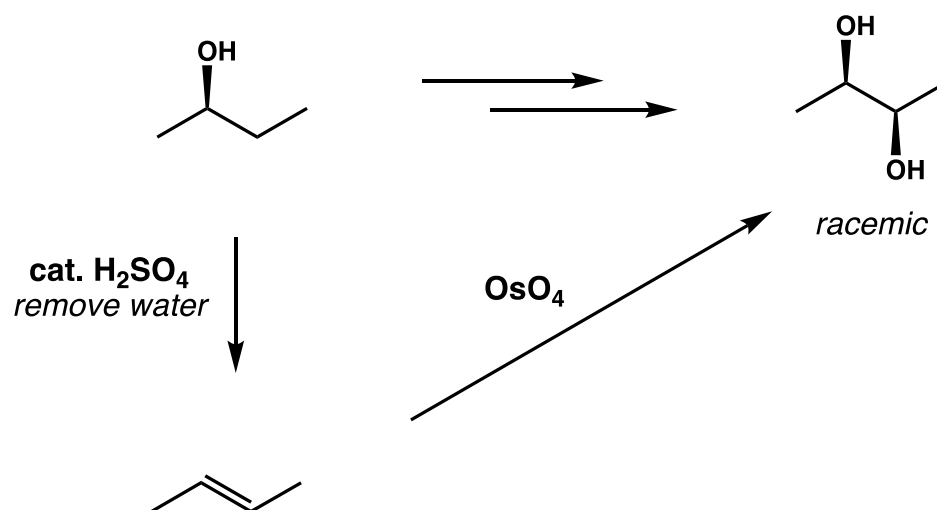
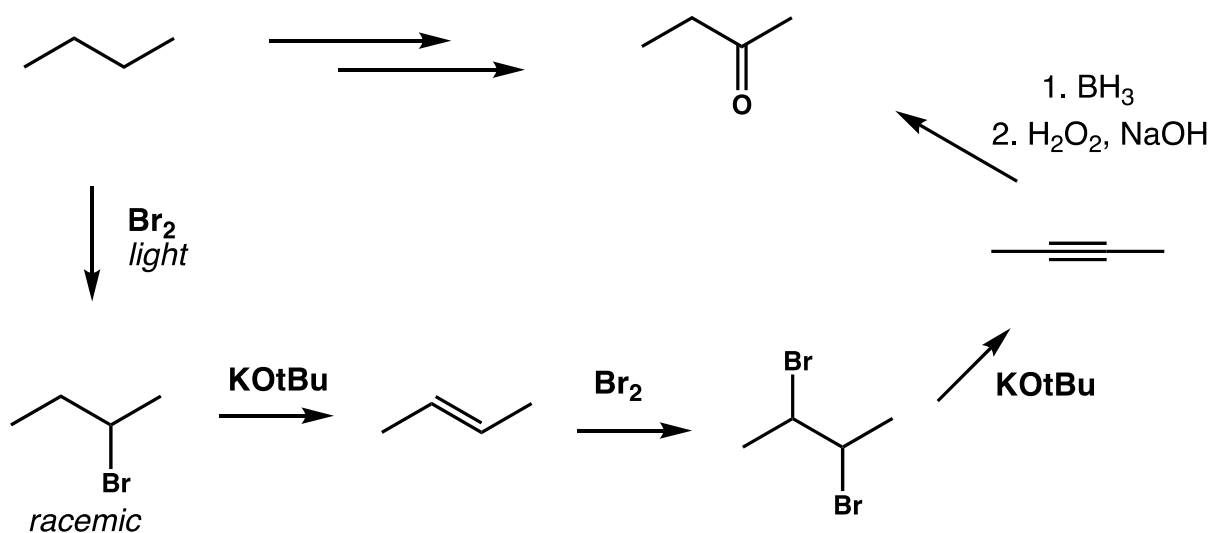
Draw the chair conformation for the following molecule, and highlight the proton which will be eliminated in an E2 reaction.





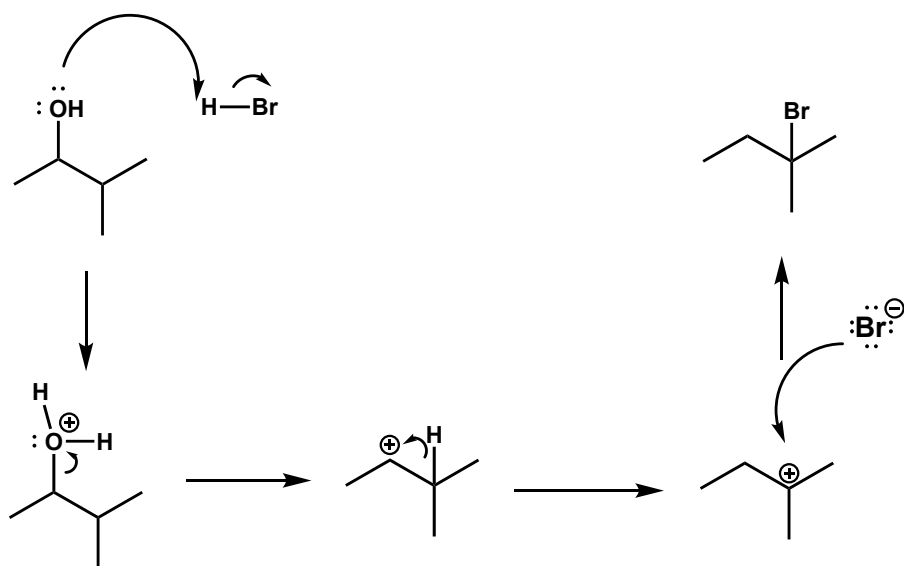
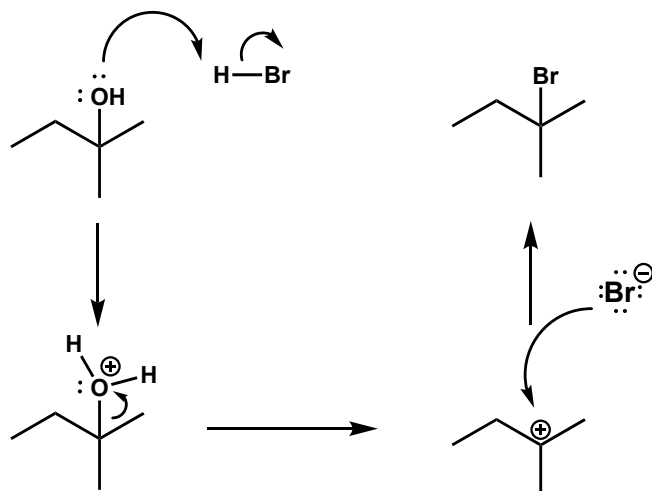
Propose synthetic routes for the following transformations.



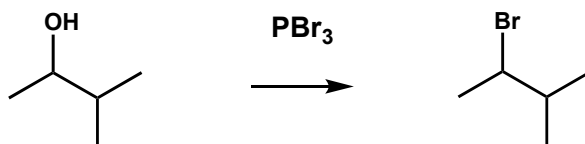


E1 Versus E2 Brominations of Alcohols

Provide the product and mechanism for each of the following substitution mechanisms.



Tip: use PBr_3 instead if possible



$\text{S}_{\text{N}}2$ avoids possible hydride shift