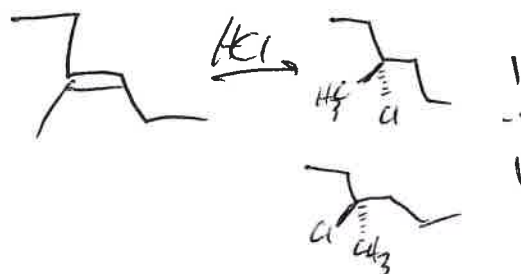


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Recall: Interplay between stereochemistry and reactivity

Ex: Achiral S.M.

→ Product w/ 1 stereocenter  
 Expect racemic product

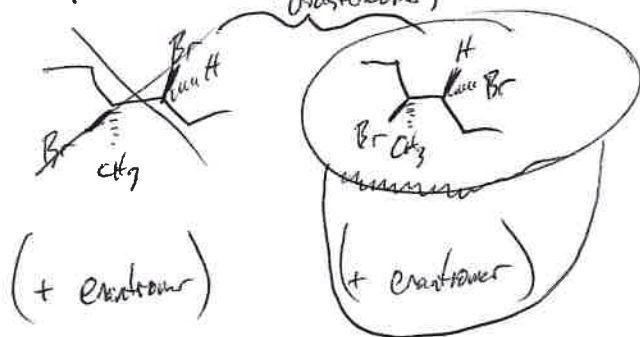


Achiral S.M

→ Product w/ 2 stereocenters



The possible products:

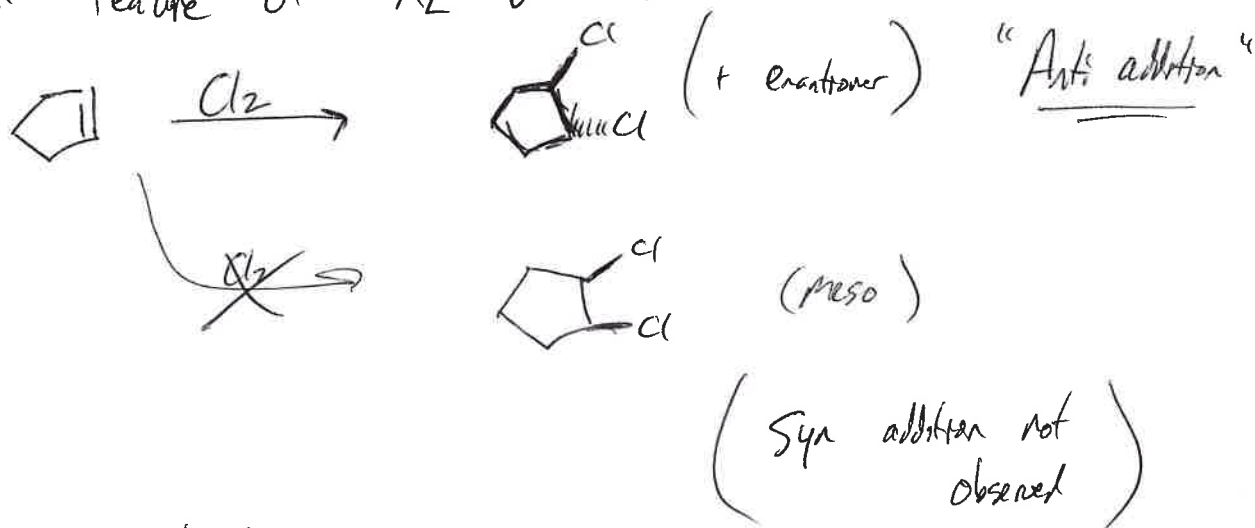


Only these stereoisomers are formed

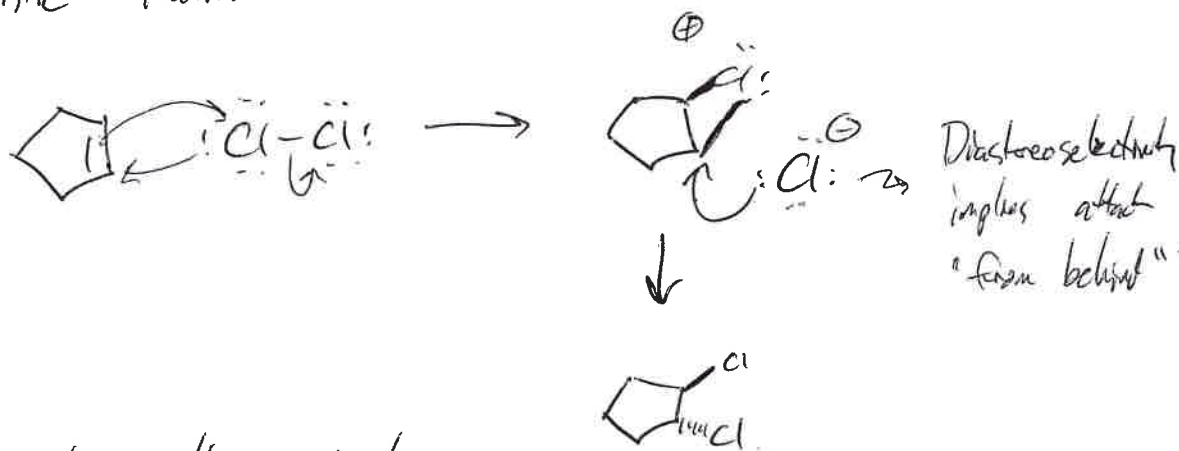
"Diastereoselectivity"

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General feature of  $X_2$  additions

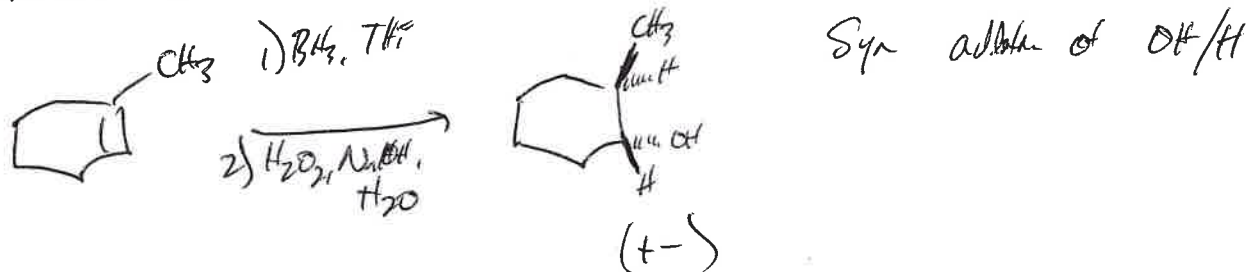


Mechanistic Rationale



Reconsider other alkene reactions

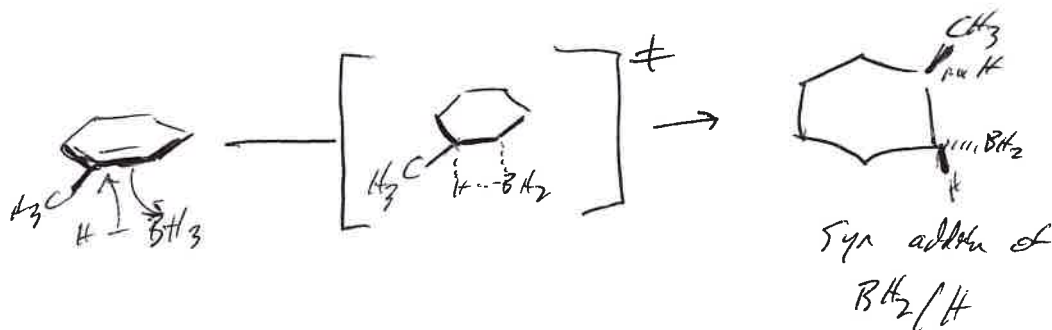
1) Hydroboration oxidation



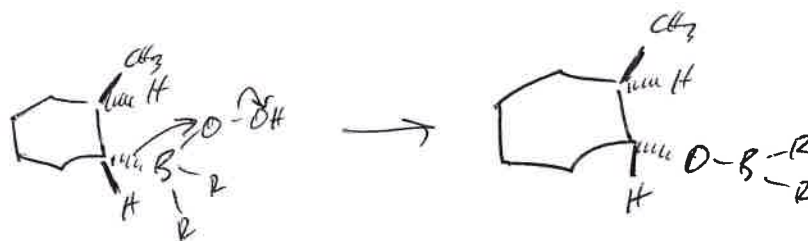
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Mech Radicals

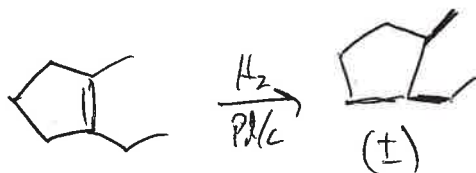
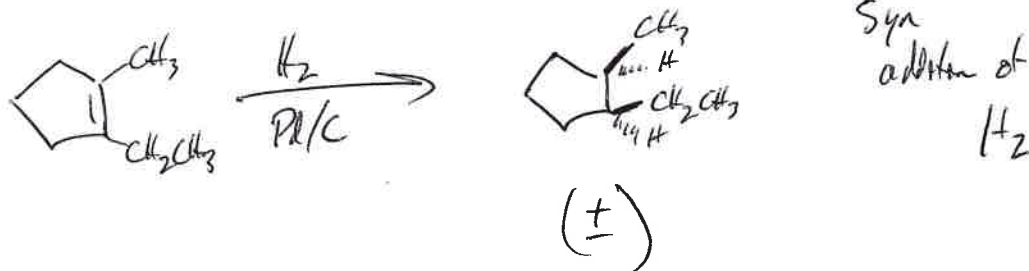
Step 1



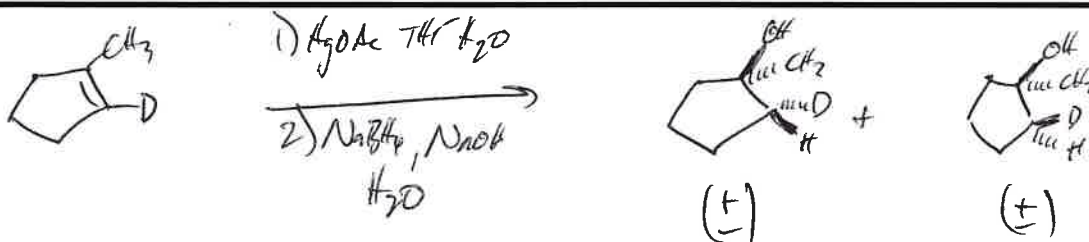
Step 2



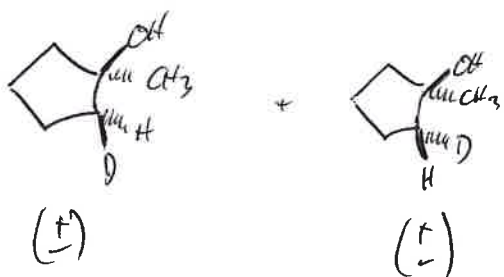
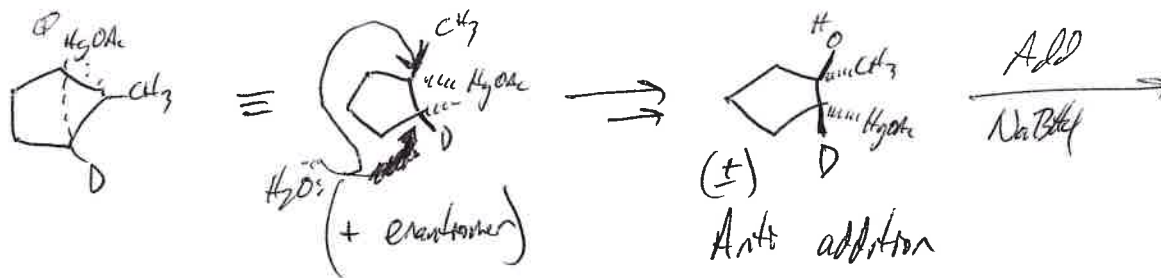
Catalytic Hydrogenation



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Mechanism



Loss of stereoselectivity at second step

End of Exam Material

Chapter 8 — Rec Problems = 24, 6, 13a, 15, 20-22, 24, 25, 27, 28 + 29 (not c), 30, 38, 41, 44, 45, 50, 57