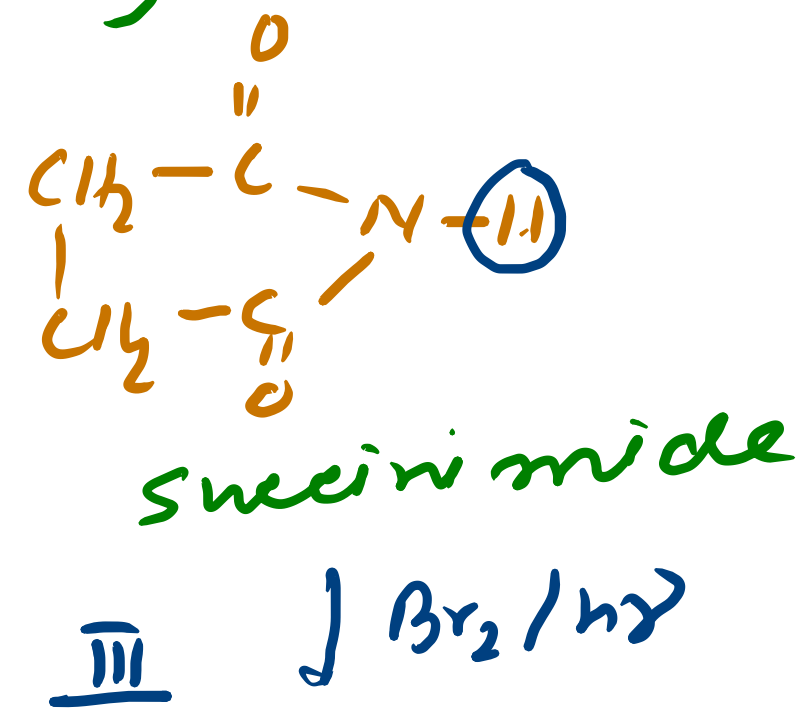
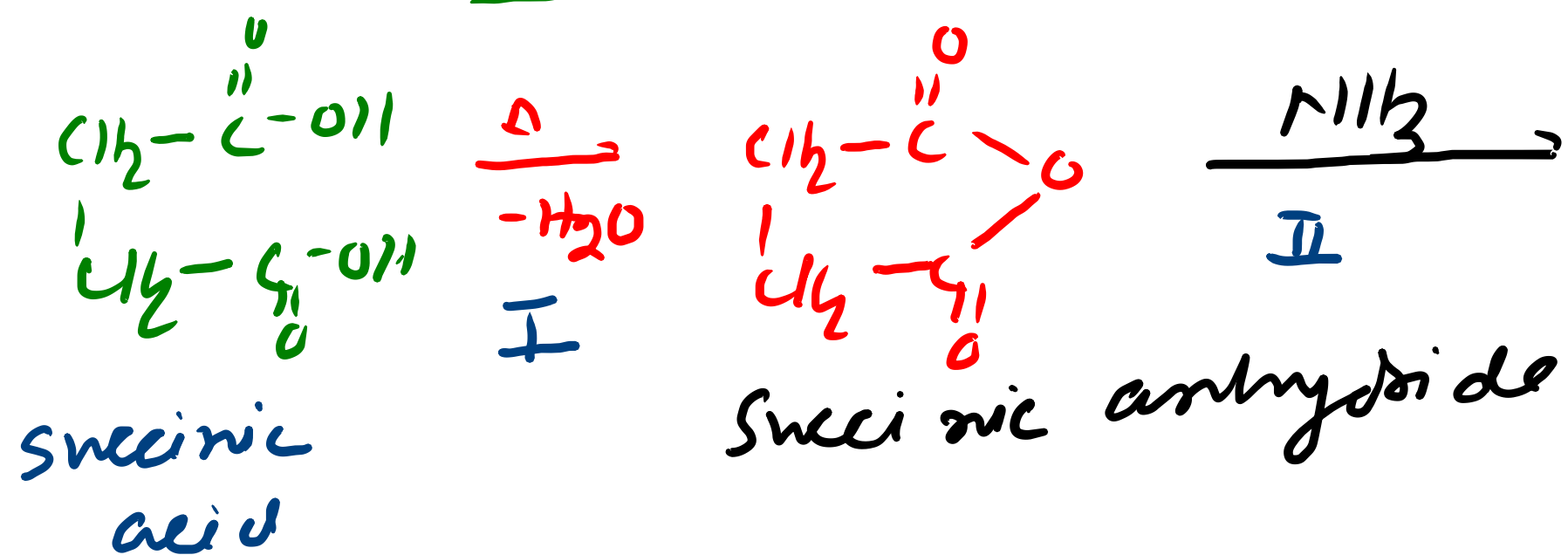
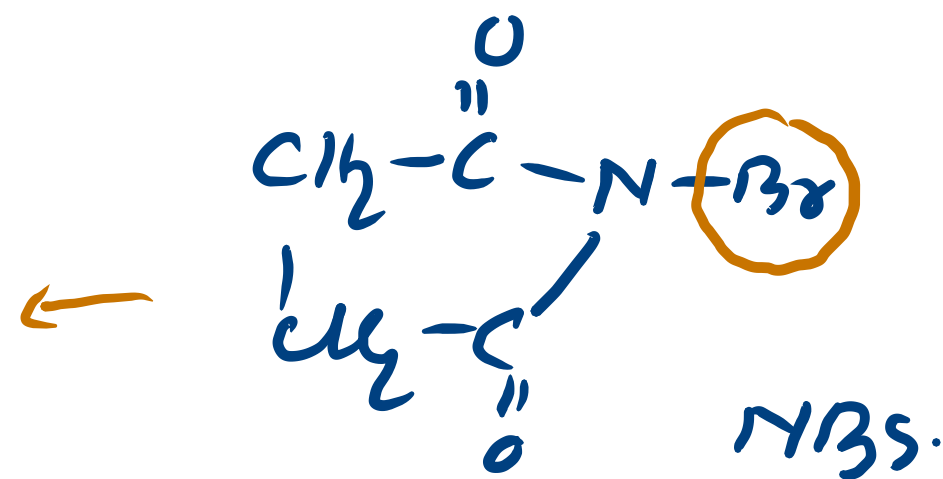
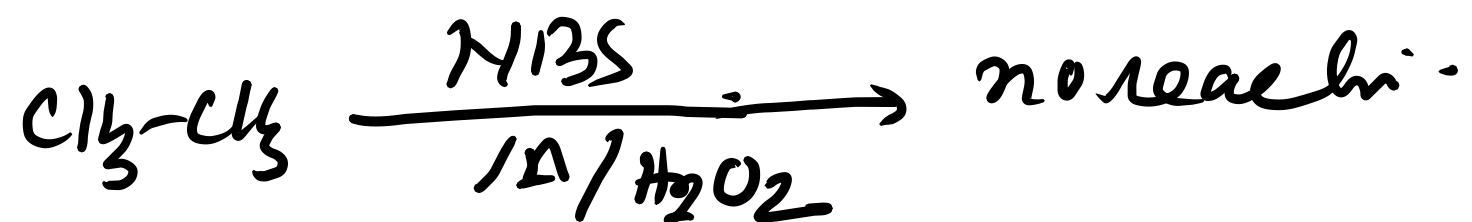


NBS: (N-bromosuccinimide)

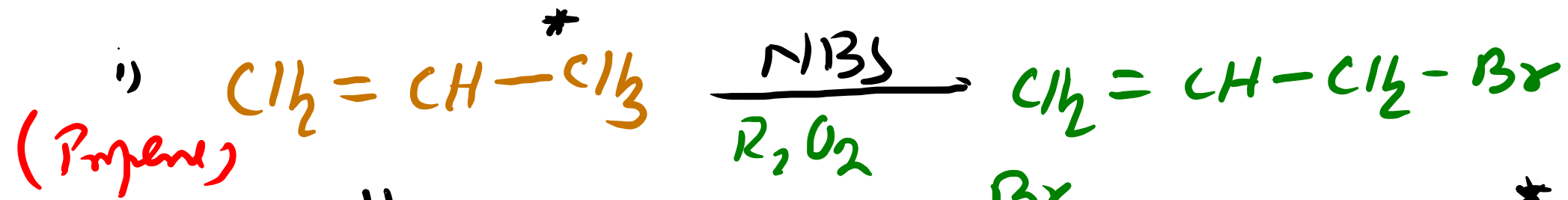


- => NBS is the source of Br[•]
- => Mono brominated prod is prod.

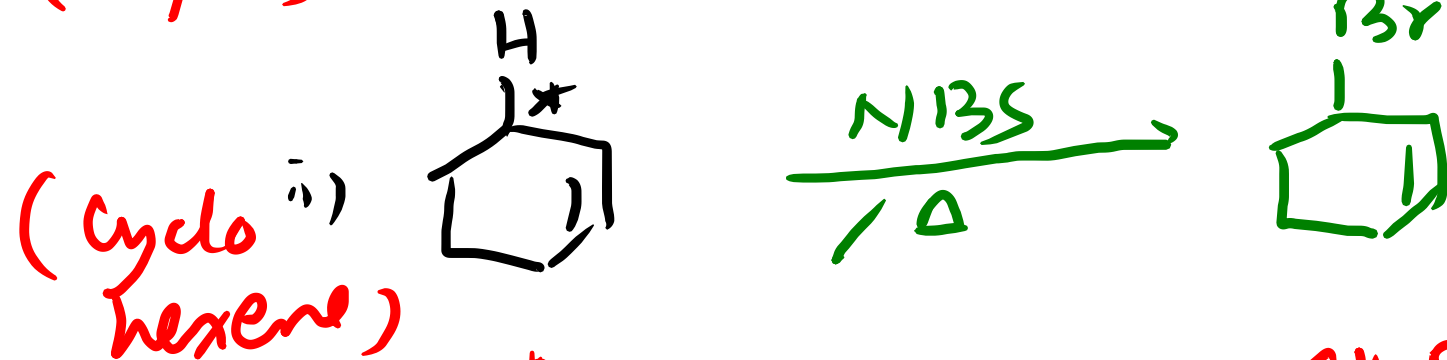


=> NBS is highly selective

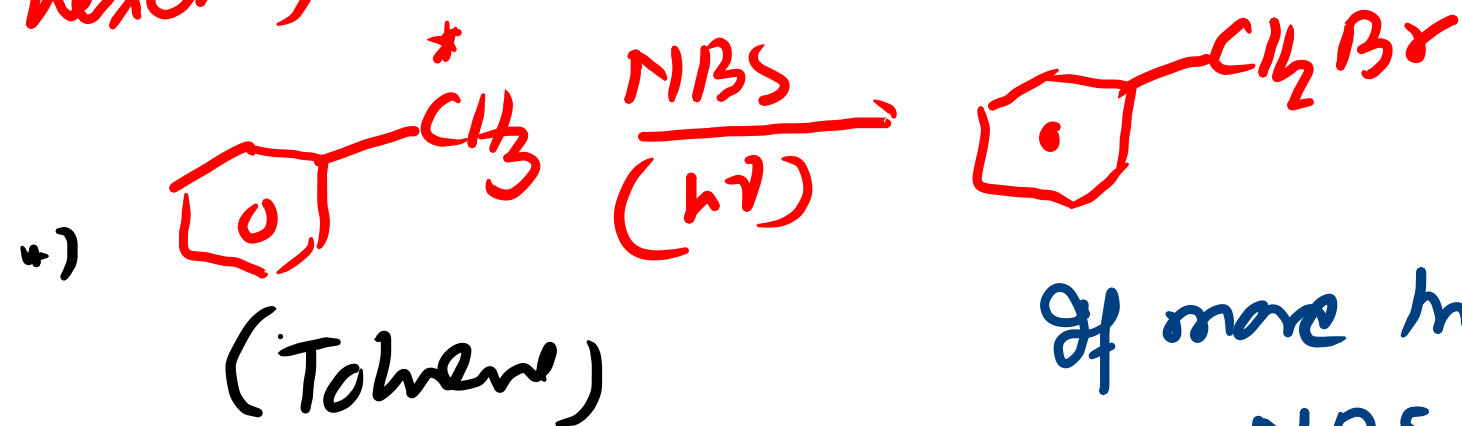
it substitutes H (at allylic or benzylic position)



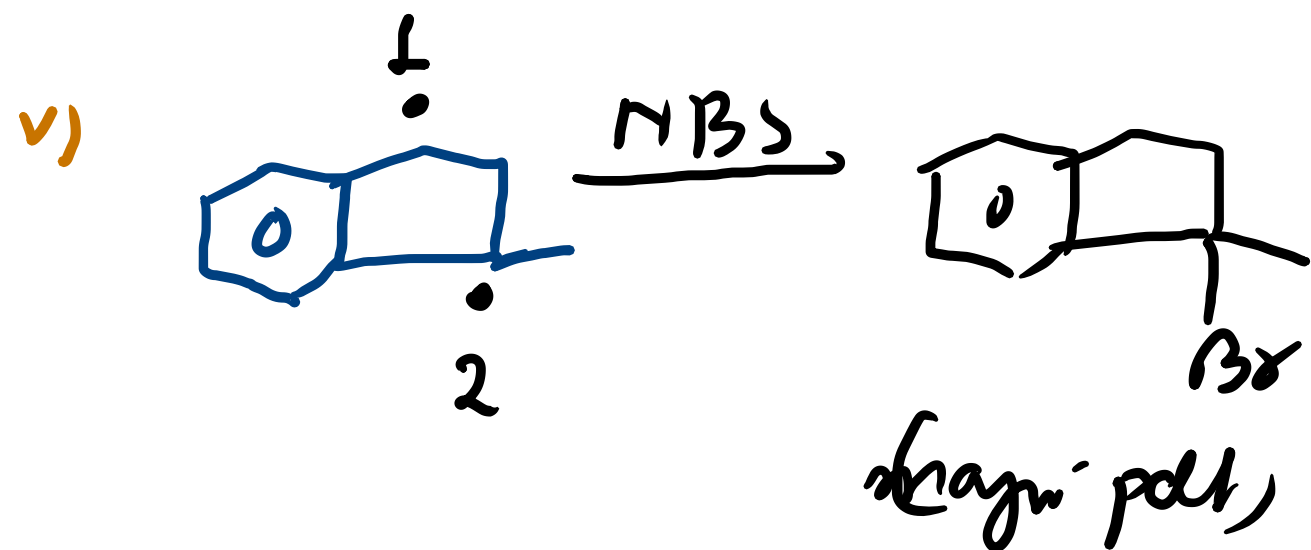
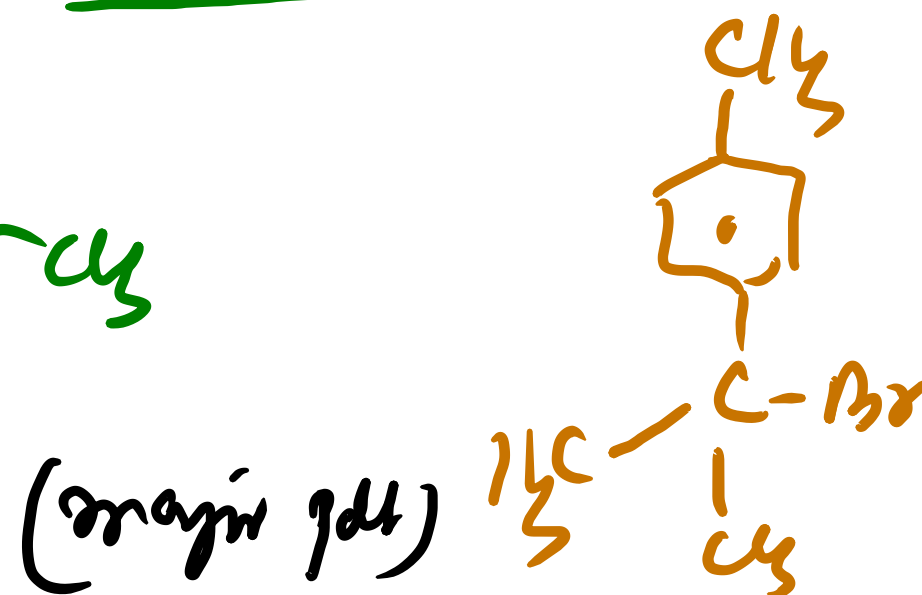
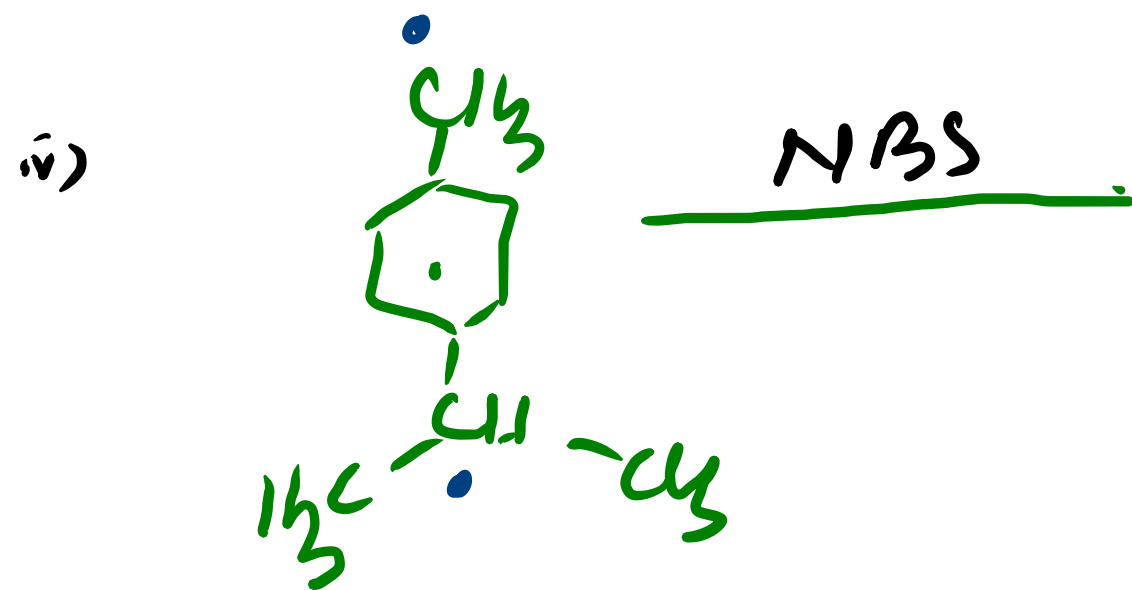
* \Rightarrow Allylic position.

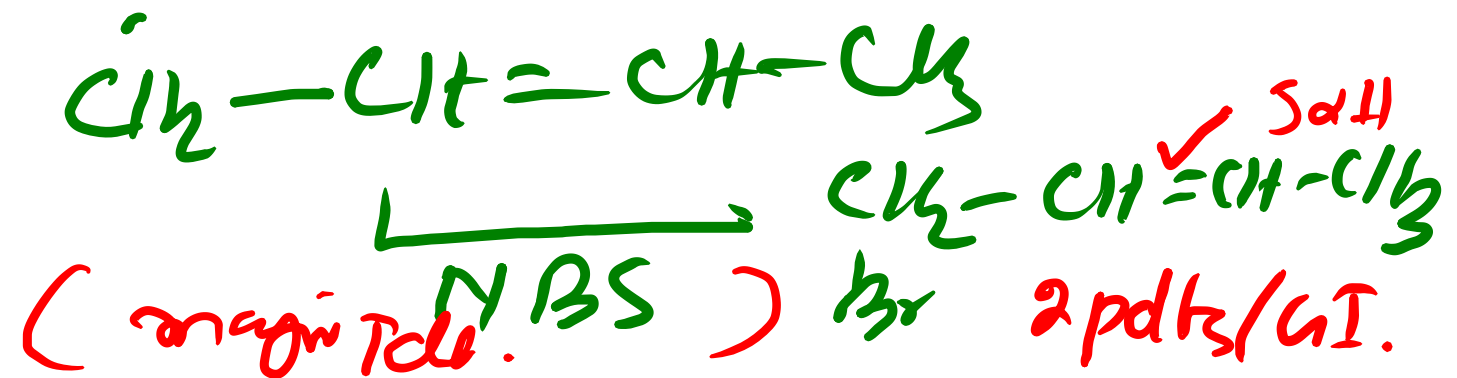
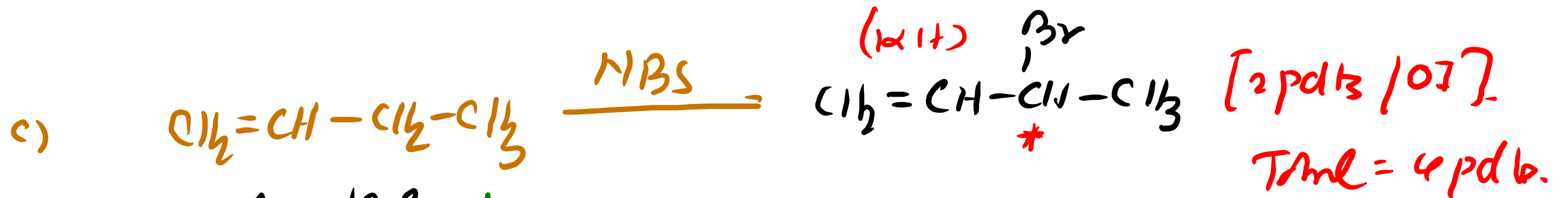
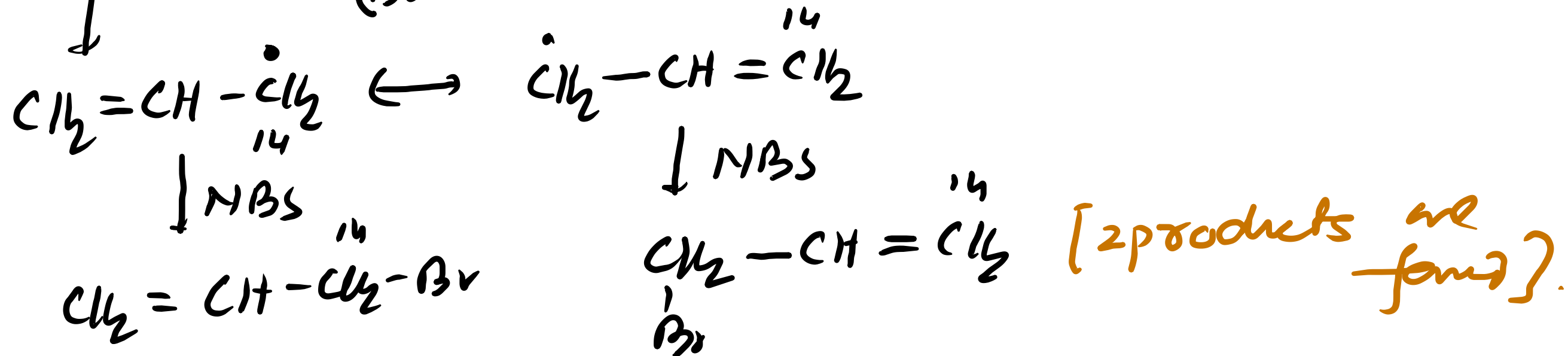
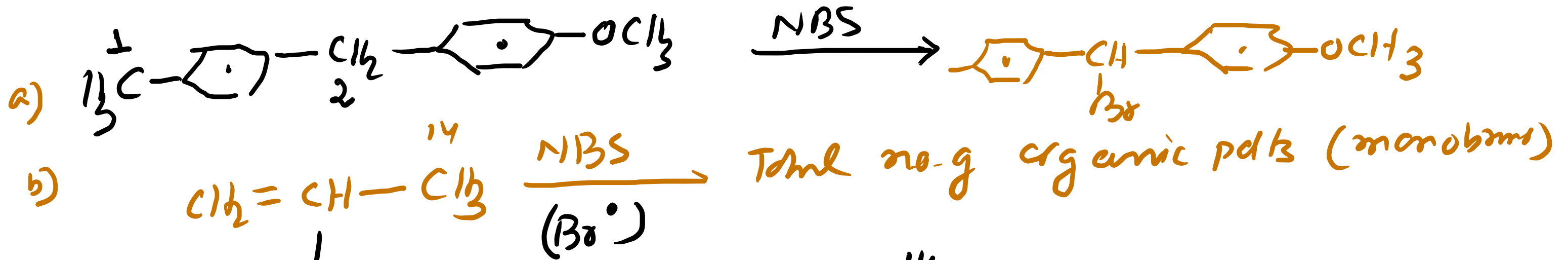


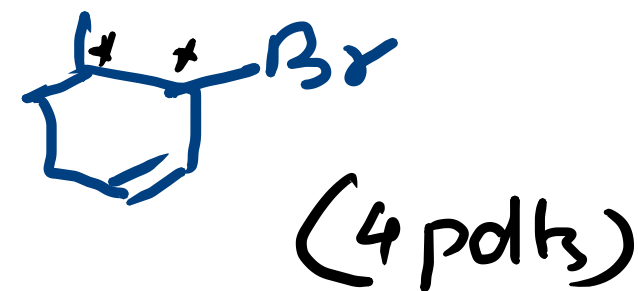
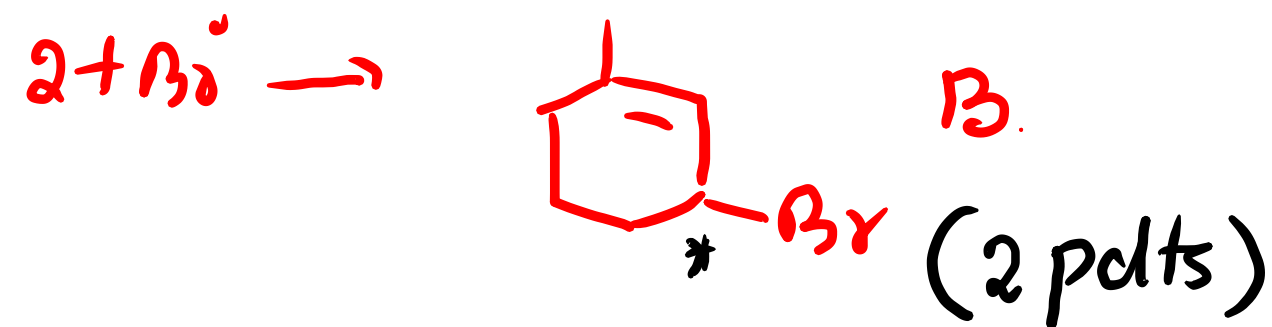
* \Rightarrow Benzylic position.



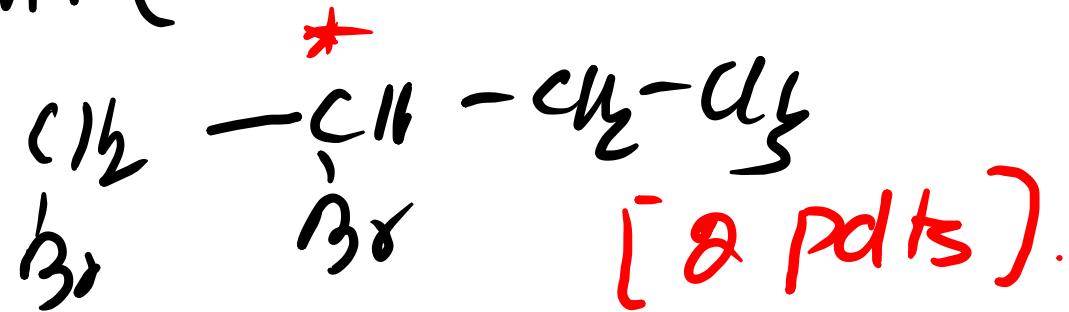
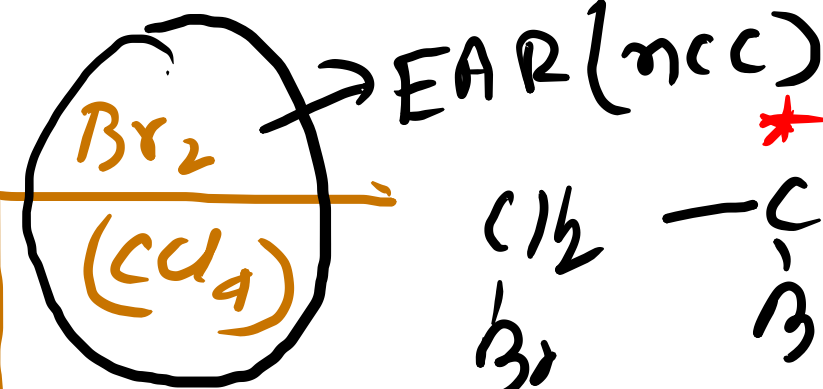
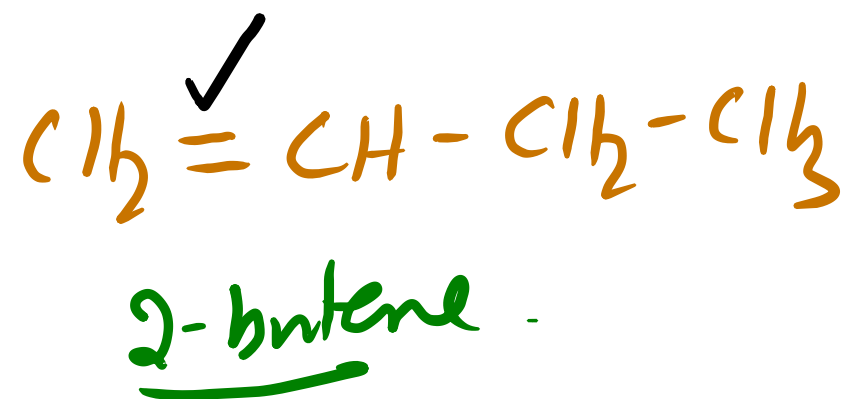
If more than one benzylic H is present NBS substitutes that H so that radical formed will be more stable.





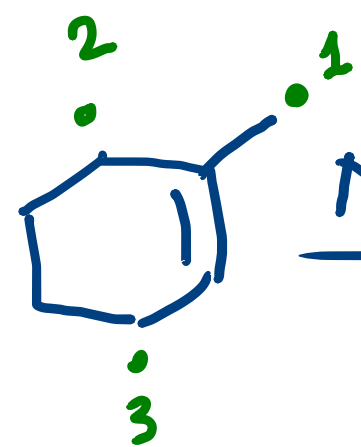


Total no. of pdts = 12.



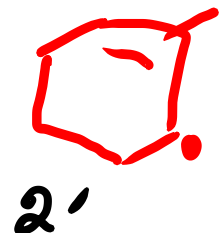
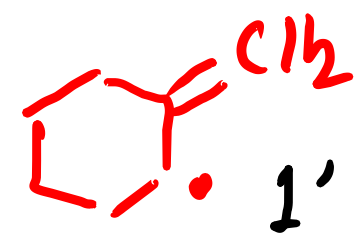
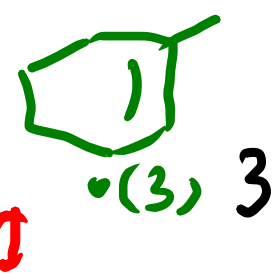
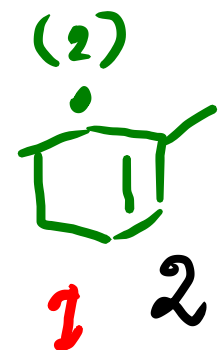
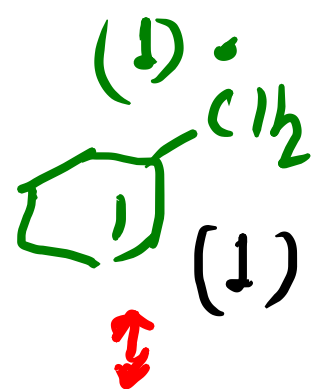
[2 pnts]

Same pnt.
 (free radical substitution)
 4 pnts → 2 pnts (GI)
 2 pnts (OI)



NBS

Total no. of
 mono bromo pnts.



1 + Br[•]



2 + Br[•]



3 + Br[•]



1' + Br[•]

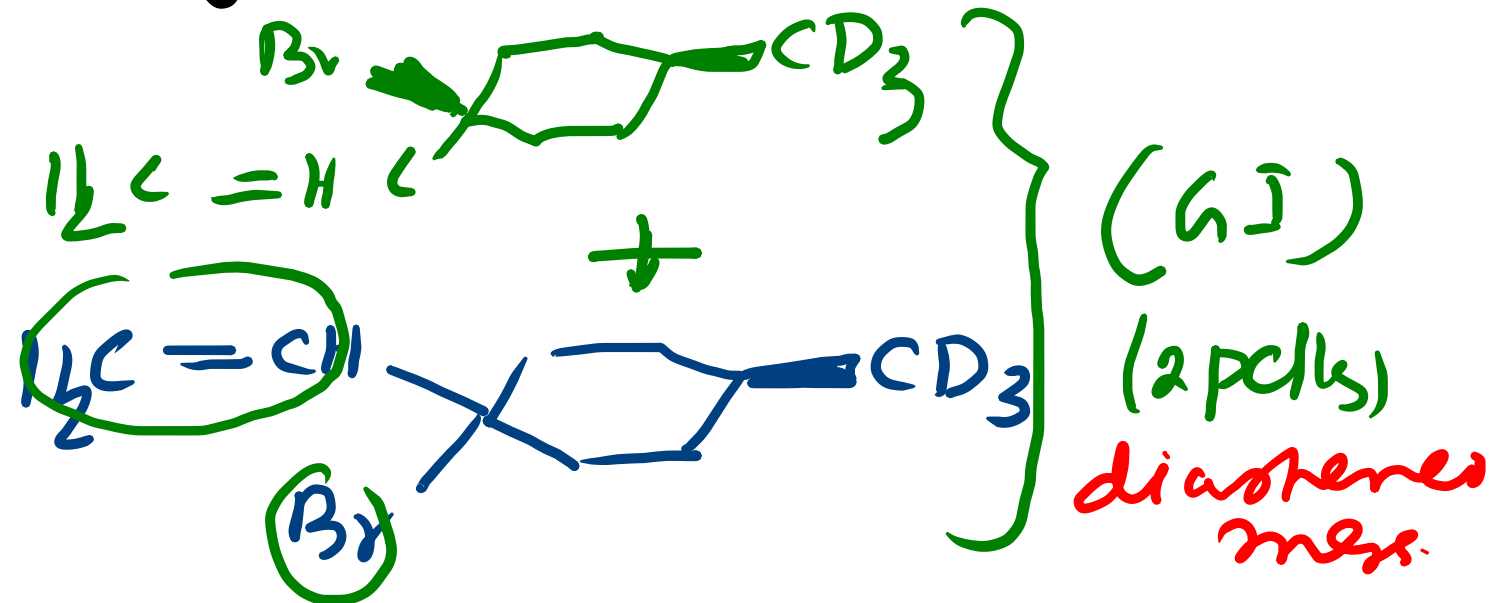
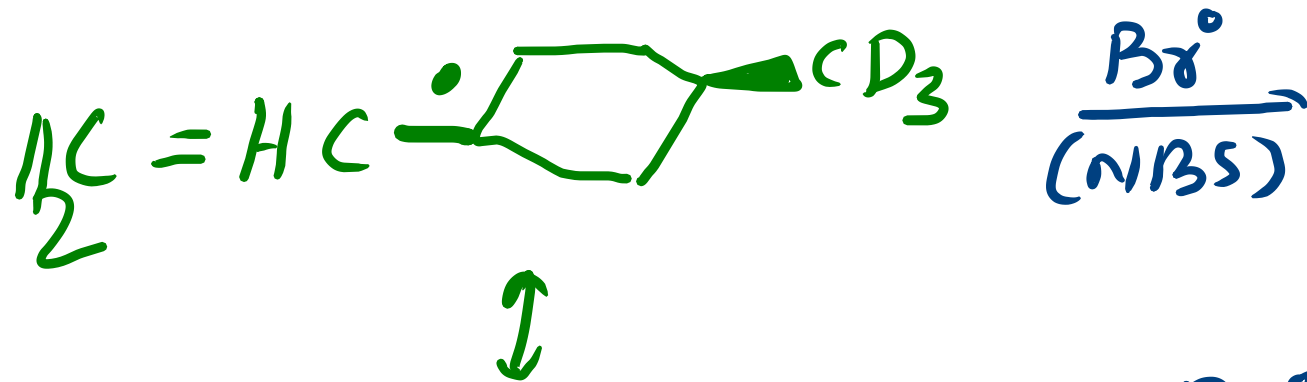
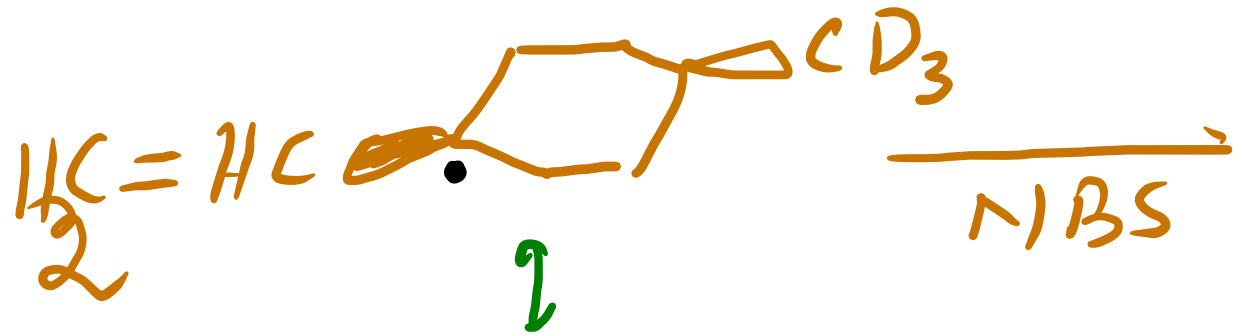


2' + Br[•]

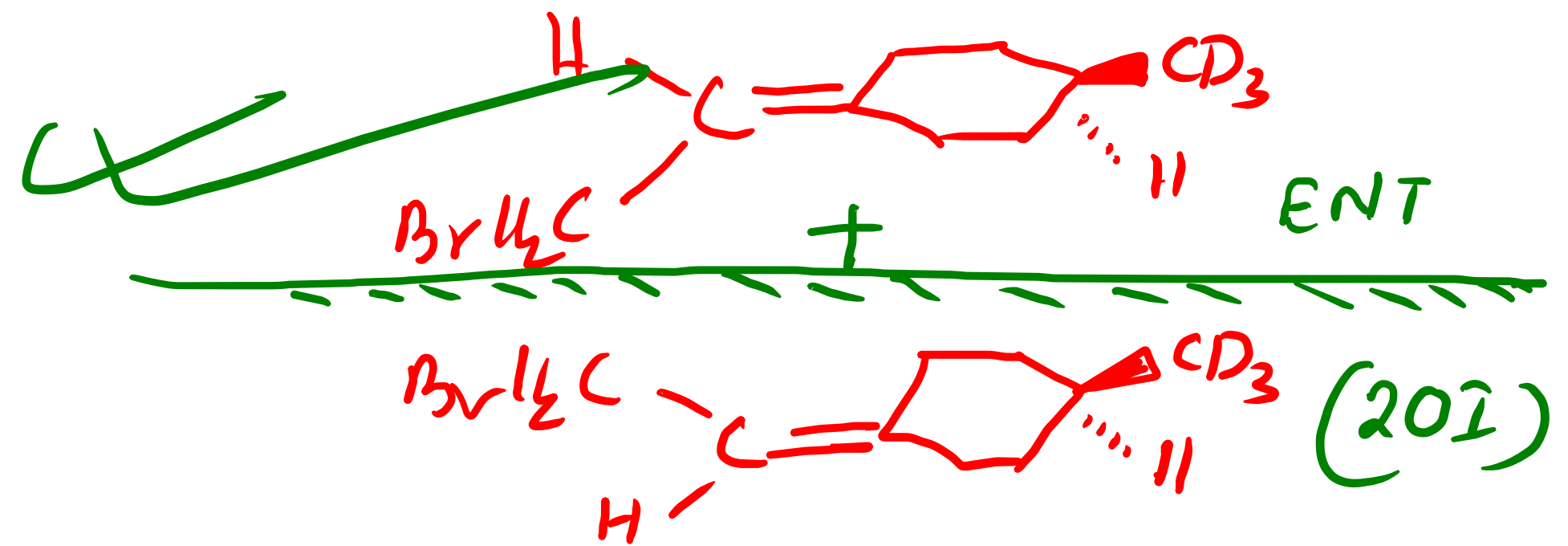


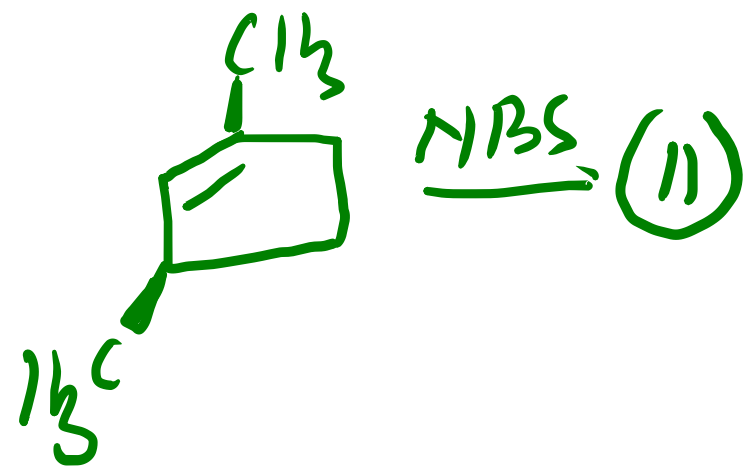
Total = 9 pnts

Tantel ne.g. marob romenah org. polts.



Ans. (4)

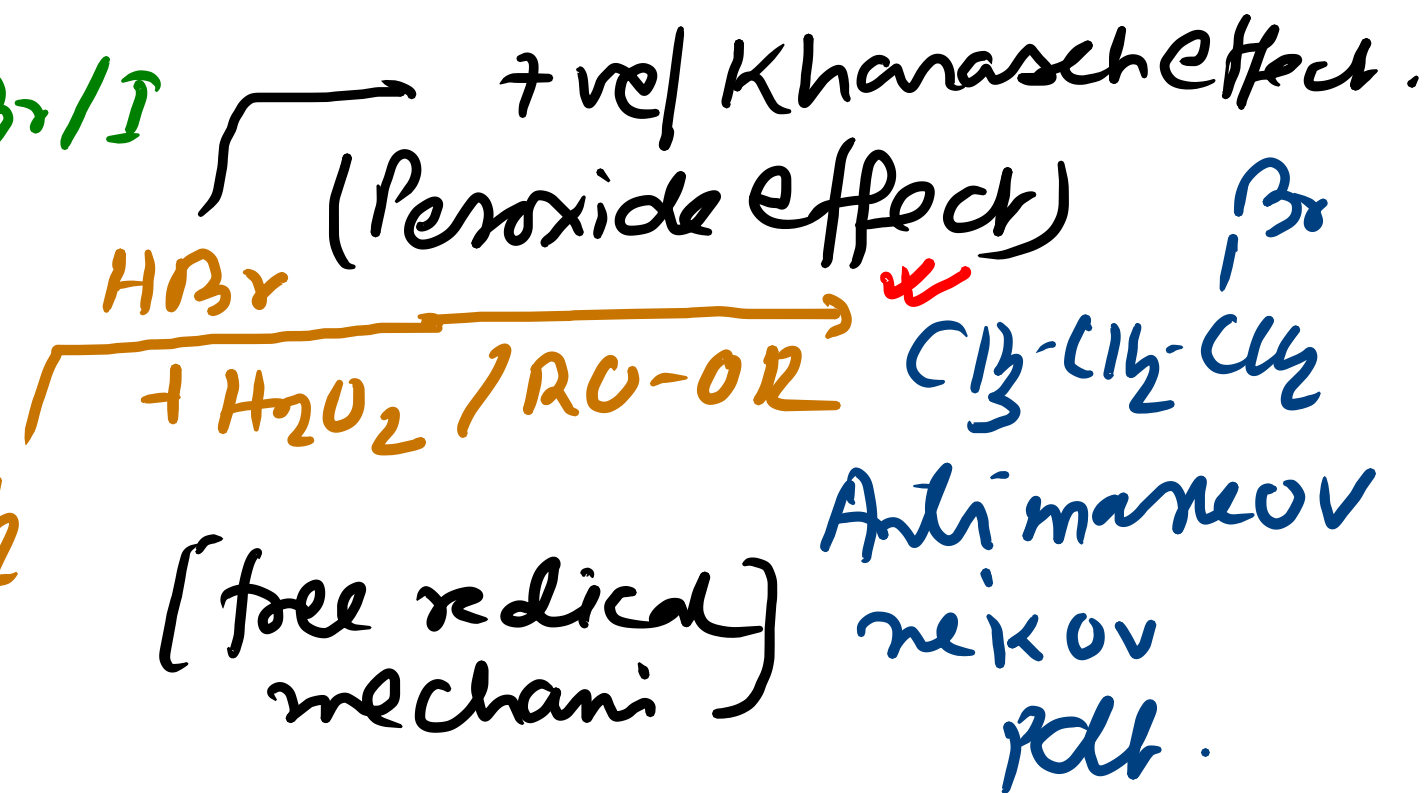
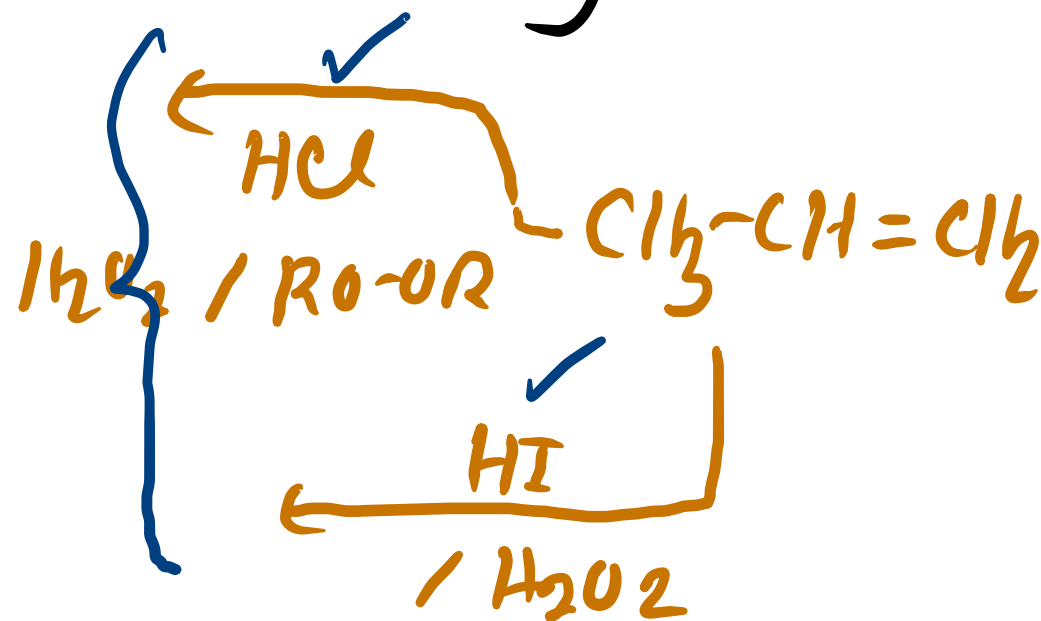
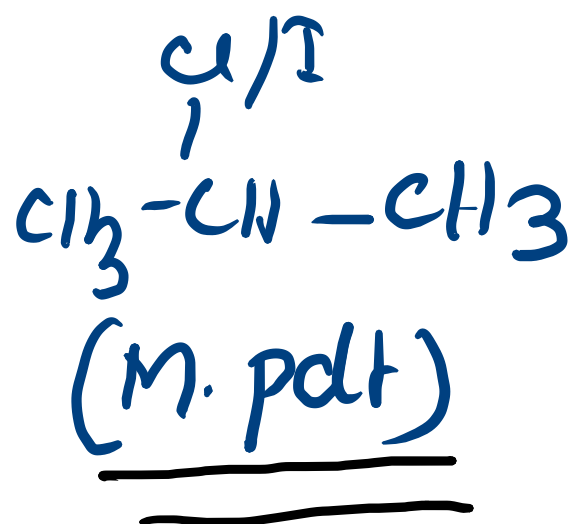
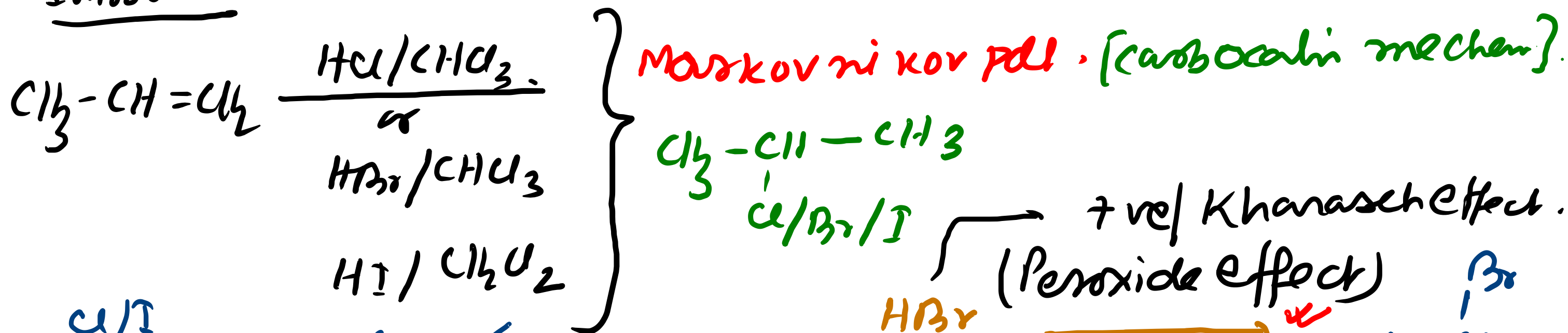




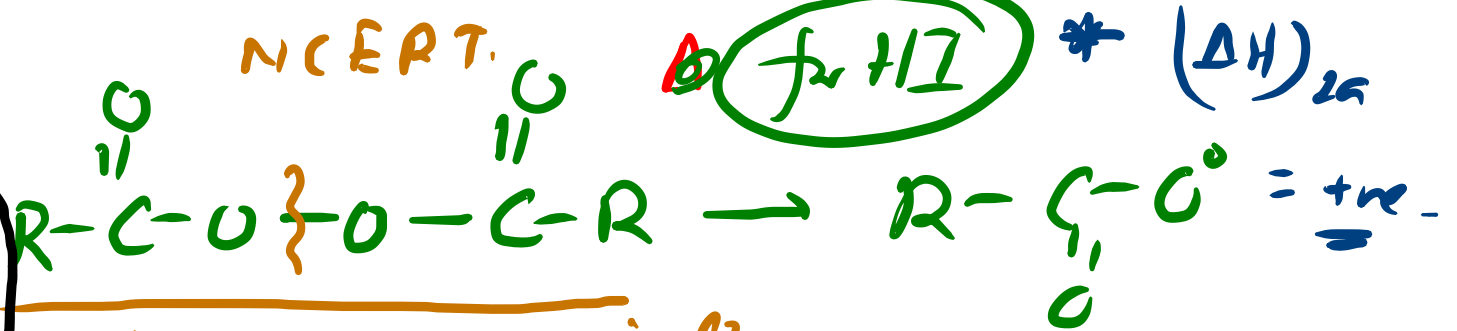
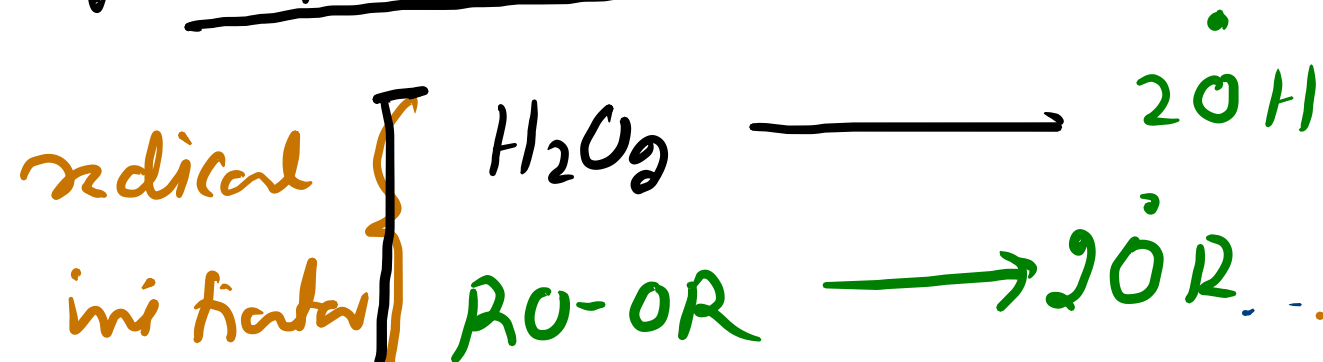
Total no. of monobrominated pds.

Anti Markovnikov product forms.
(Peroxide effect) Kharasch effect)

Introduction



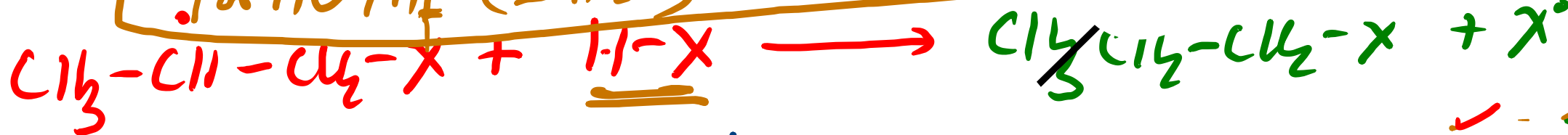
: Explanation with mechanism:



chain initiation

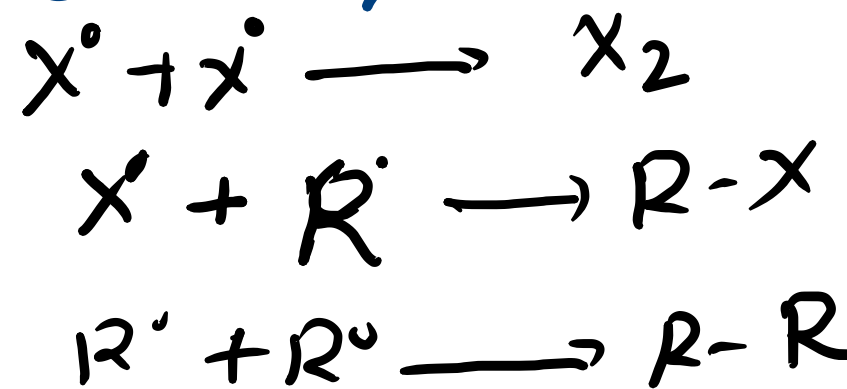


$\Delta H = \Delta H^\circ - TAS$



chain propagation

To make this reaction spontaneous



$(\Delta H)_{2a}$ & $(\Delta H)_{2b}$ should be -ve.

chain Termination.

for HBr ally



