

LEC (16)

CHEM 30A

May 11th ⑬

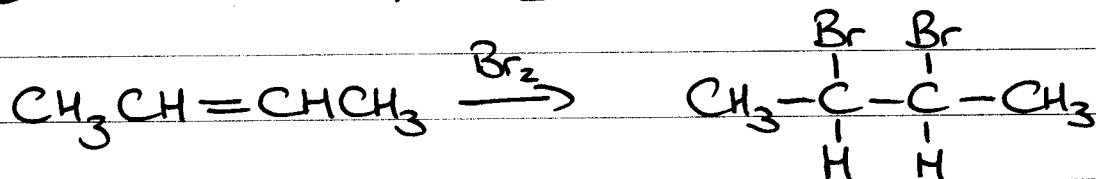
- ① ADDITION of H₂O
- ② ADDITION of Br₂/Cl₂
- ③ ADDITION of HOCl/HOBr

PROBLEMS 6.7, 6.8 (4th) 6.9, 6.10 (3rd)

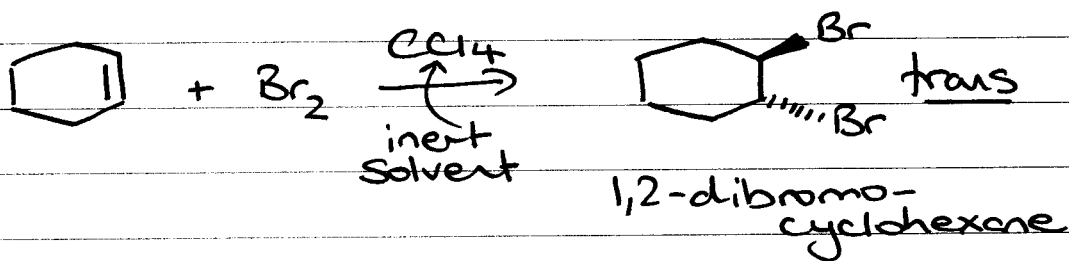
READ 6.3 - 6.6.

① ADDITION of H₂O
see page 6 of Lec 15

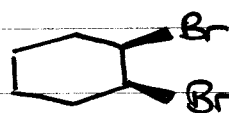
② ADDITION of Br₂/Cl₂



note:



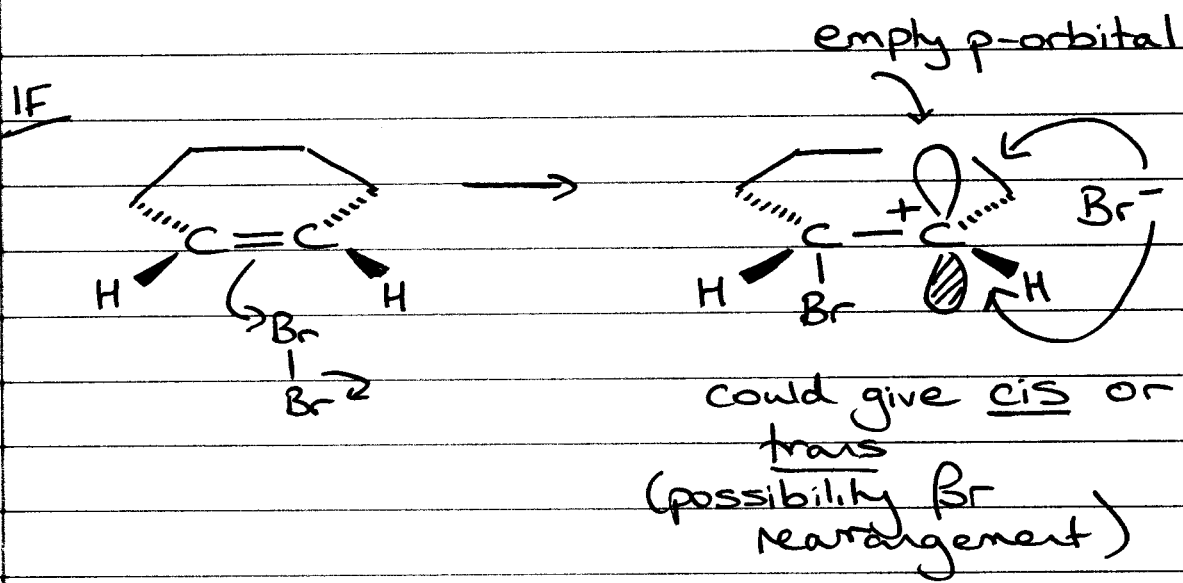
STEREOSPECIFIC REACTION

cis isomer  is NOT formed

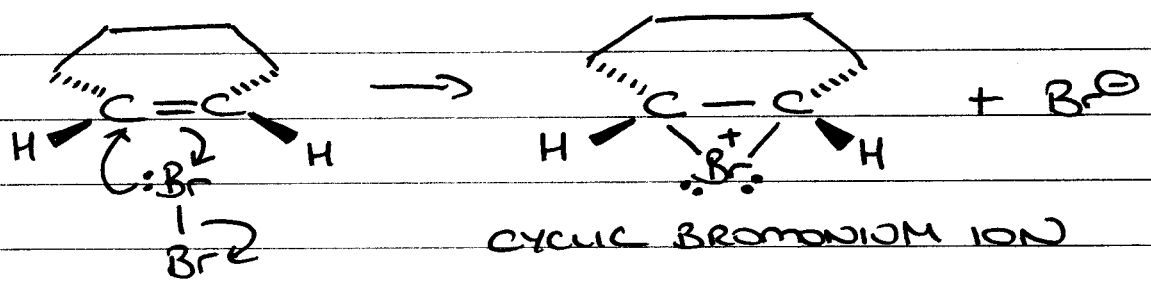
note:

STEREOSPECIFIC (exclusion) (REGIO)
STERESELECTIVE (preference)

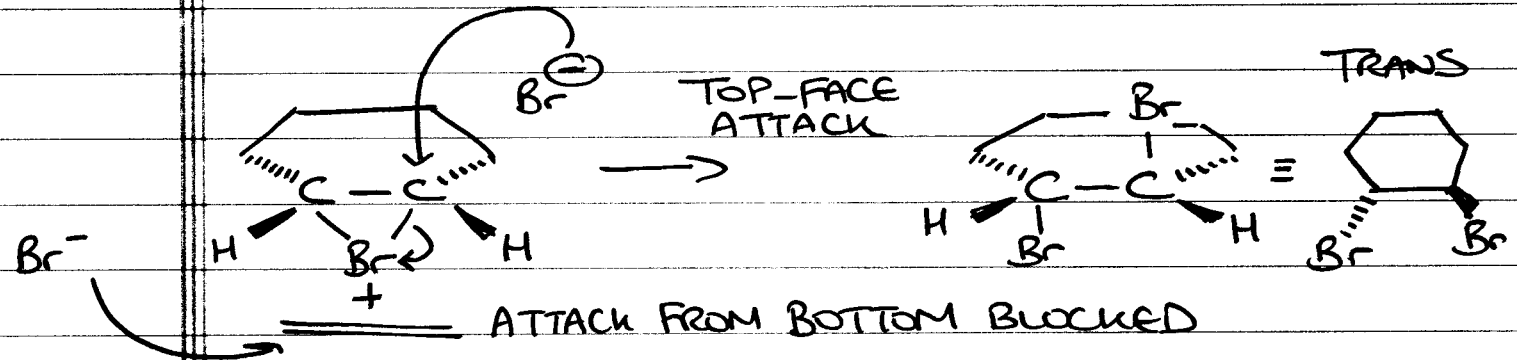
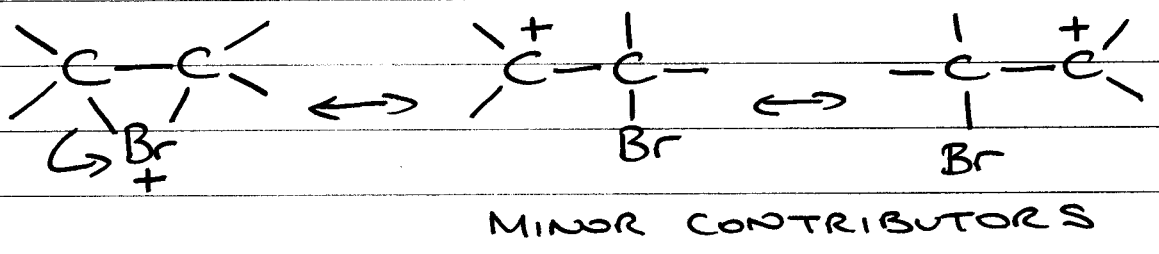
- consider the mechanism



mechanism is:



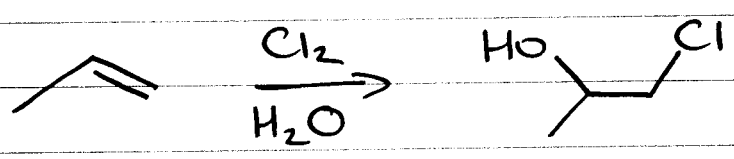
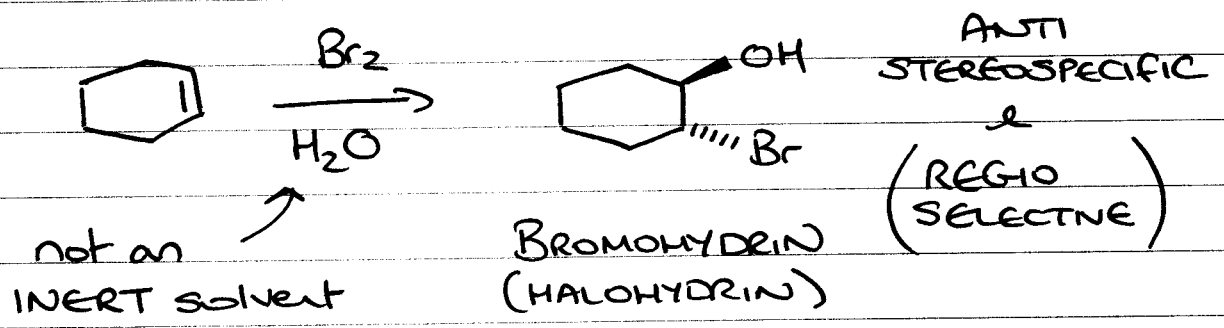
CONTRIBUTING RESONANCE STRUCTURES



REACTION PROCEEDS w/ ANTISTEREOSPECIFICITY

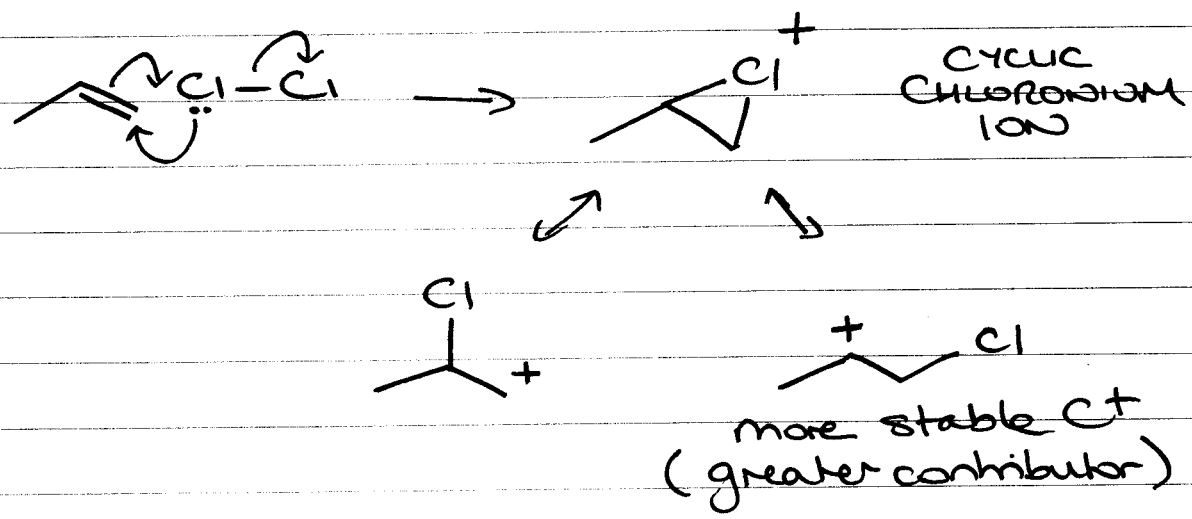
- If Br⁻ had attacked at other C atom
=> ENANTIOMER

3 ADDITION of HOCl/HOBr



- OH adds to more substituted C ATOM of the alkene

mechanism:



OPENS VIA MORE STABLE C⁺

