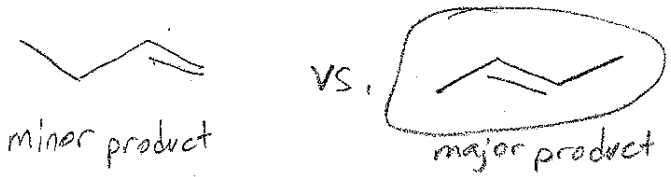
CH235 SI Bliss Chang 10/31/13

Elimination

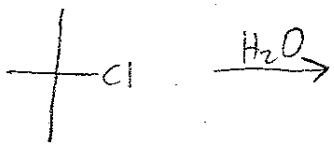
- Generation of an alkene
- Zaitsev's Rule: more substituted, internal double bond is preferred

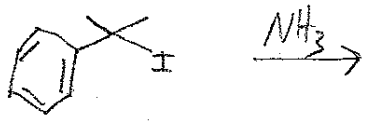


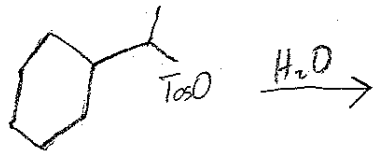
minor product major product

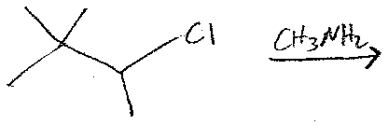
E1

- Formation of carbocation
- Follows Zaitsev's Rule
- Protic, polar solvents
- 3° > allylic = benzyllic = 2°
- Favored by weak base
- Rate = k [R-X]

1) 

2) 

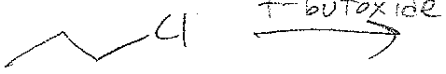
3) 

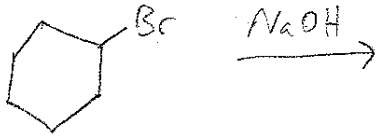
4) 

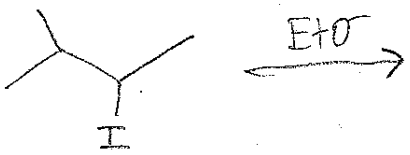
E2

- Rate = k[R-x][nuc.]
- Strong base preferred
- Polar aprotic solvents favored
- $3^\circ > 2^\circ > 1^\circ$
- Requires Hydrogen to be 180° (anti) to leaving group

- Stereospecific Product
  - bulkiest groups on opposite sides
  - If 2 H's on carbon, both E & Z can result

1) 

2) 

3) 

4)