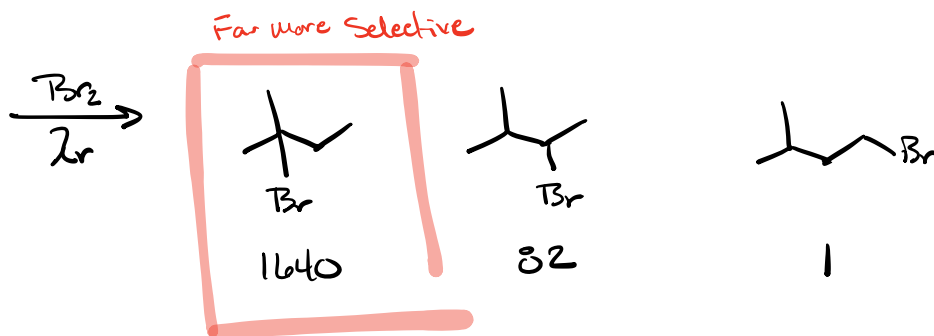
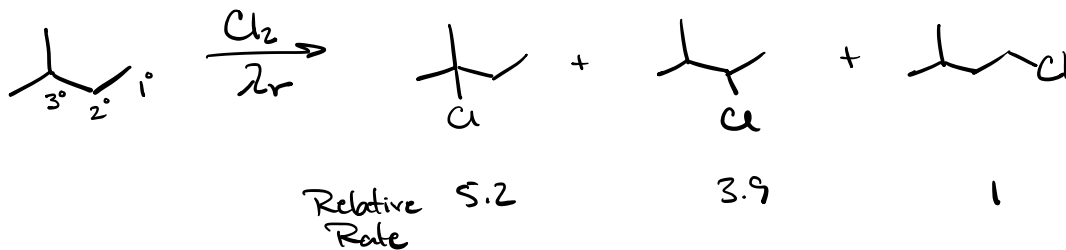


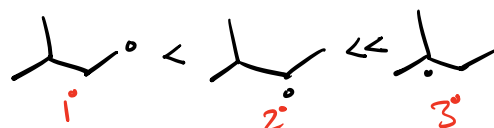
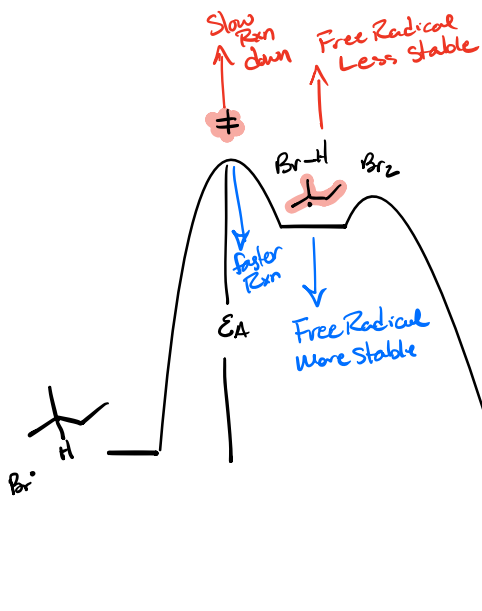
Free Radical Reactions



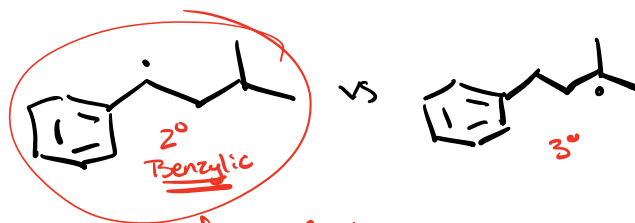
>90%

Major

Bromination

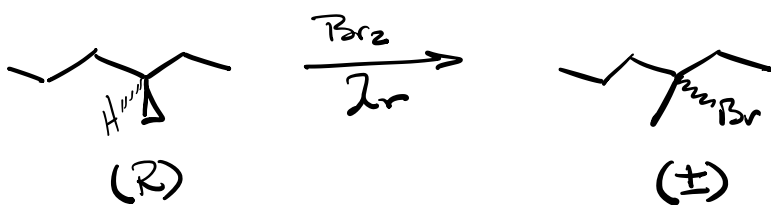
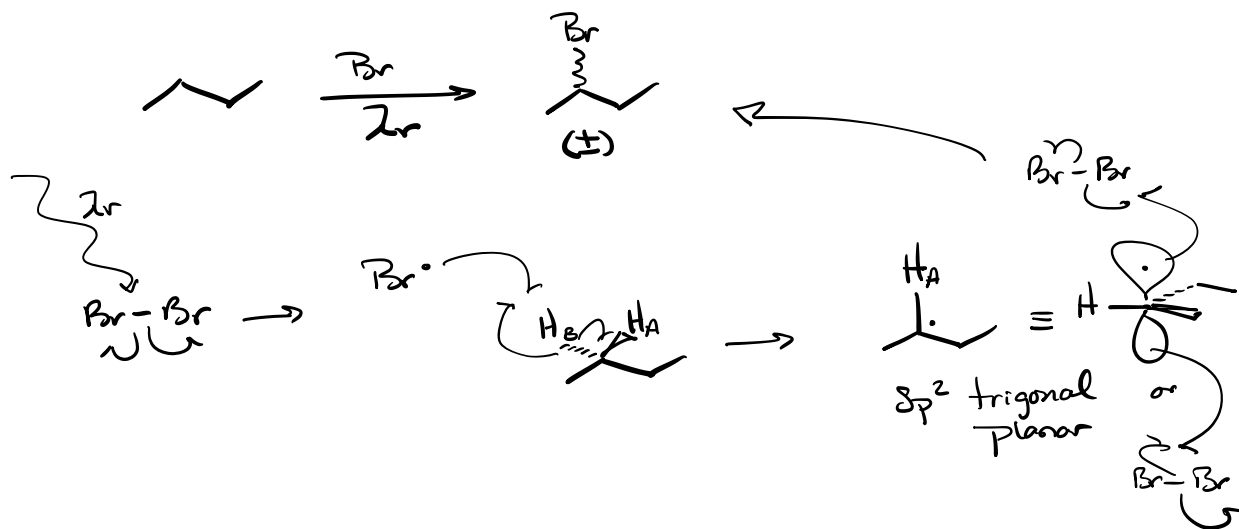


But...

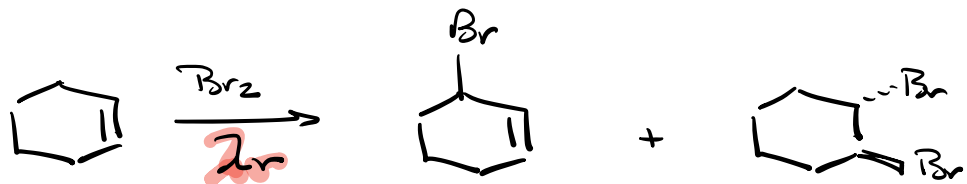


far more stable!
 Benzylic w/ Resonance

Stereoselectivity



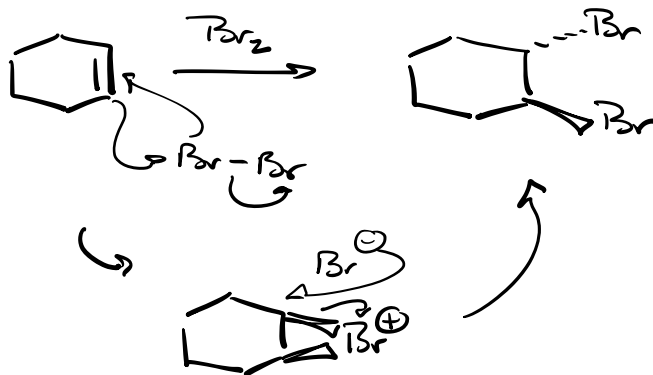
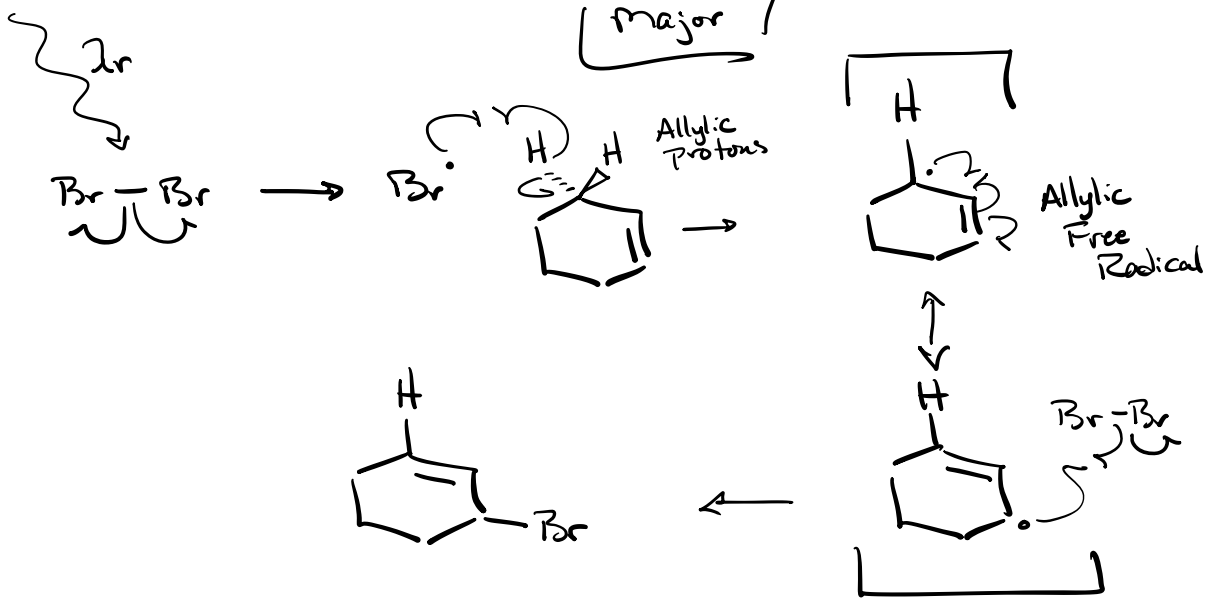
Allylic Halogenation



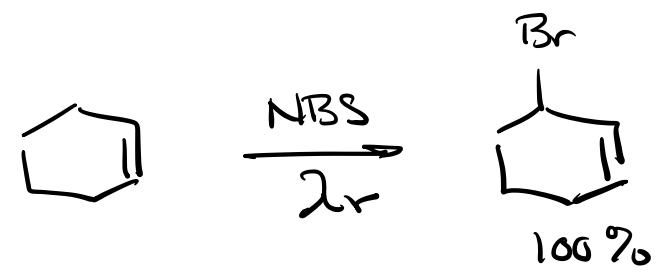
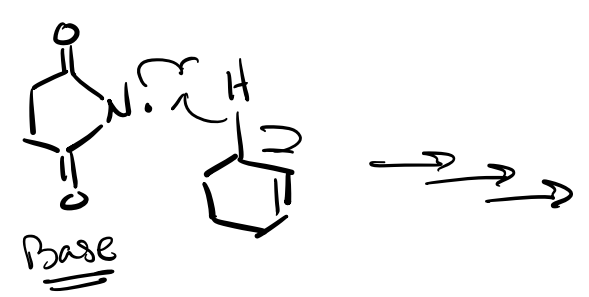
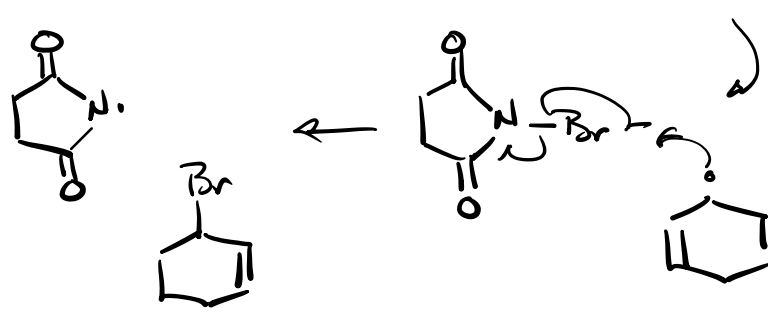
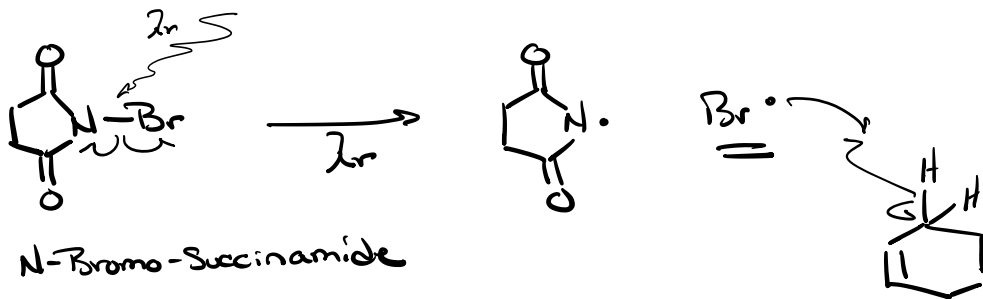
Allylic Bromination

Bromination

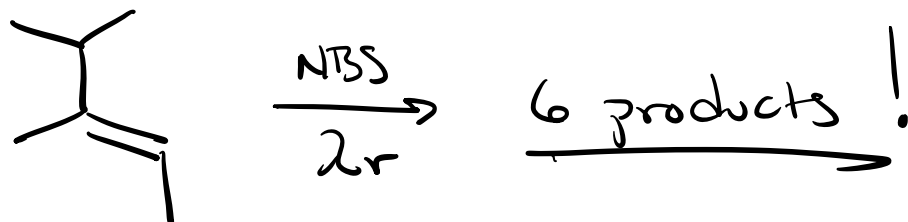
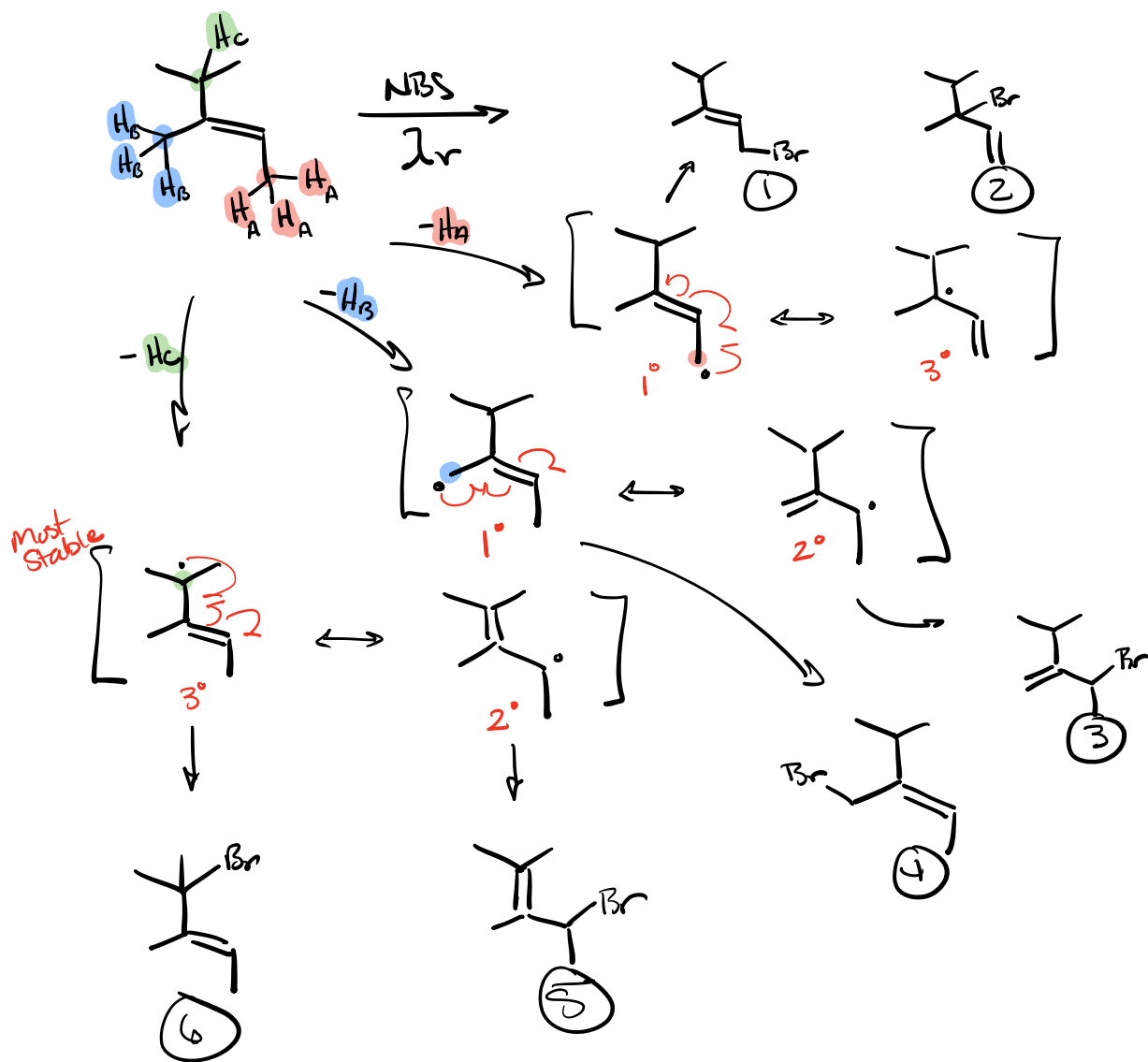
Major

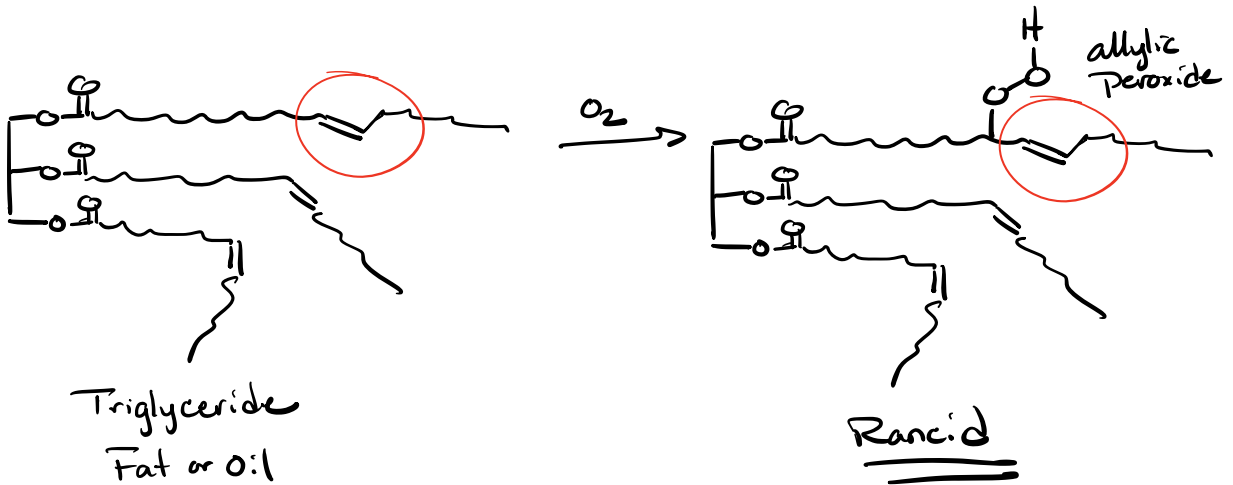
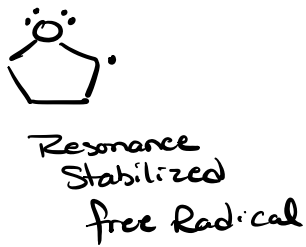
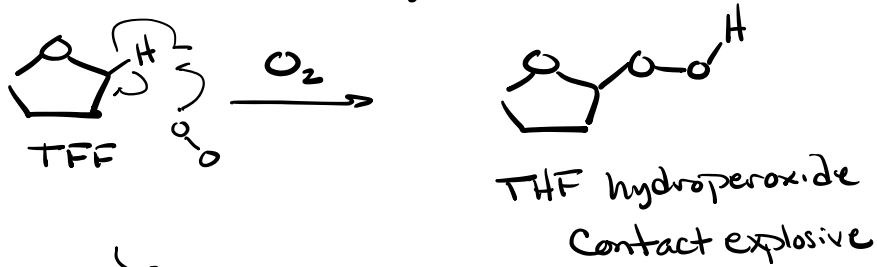
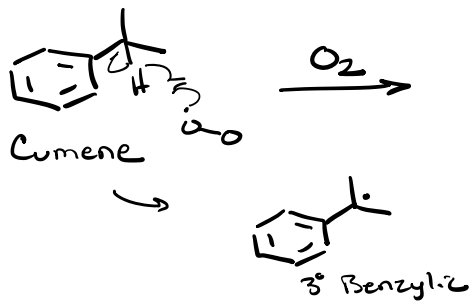


To avoid the electrophilic addition we use NBS

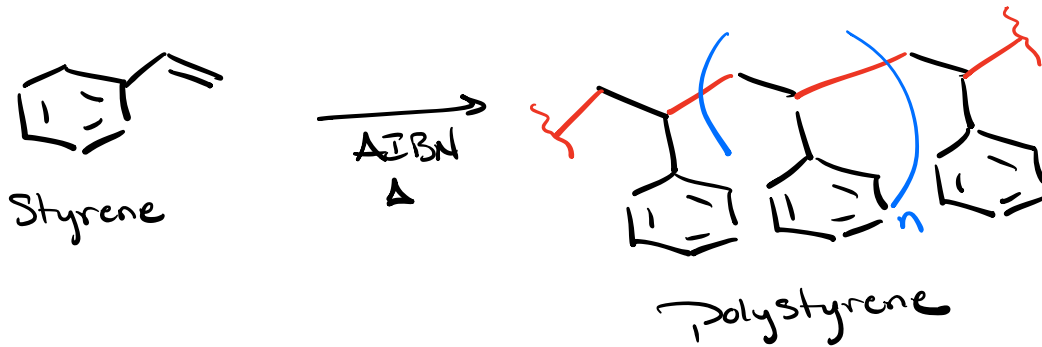
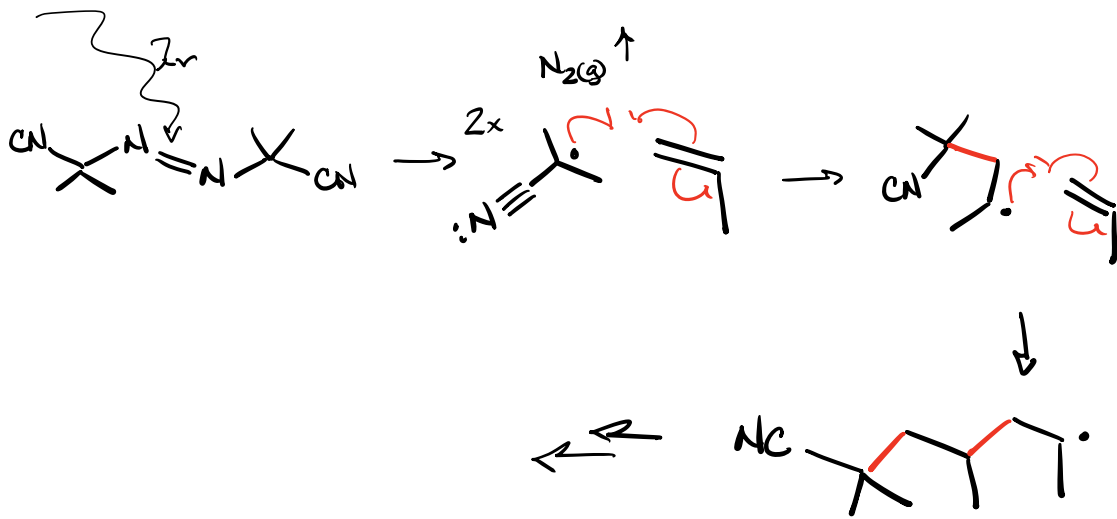
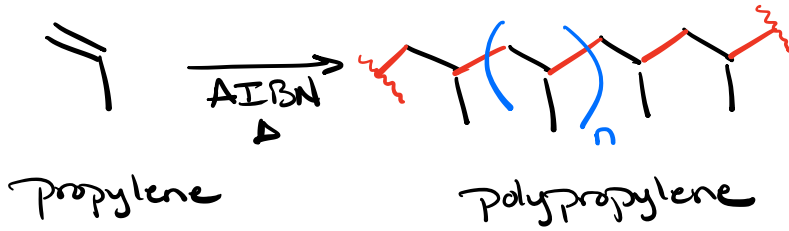


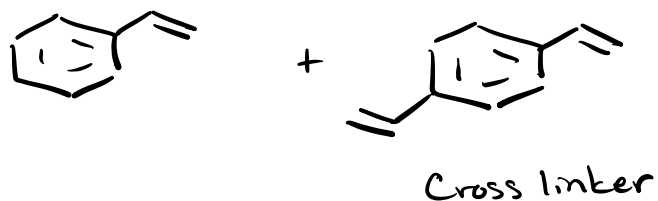
This can get Complicated



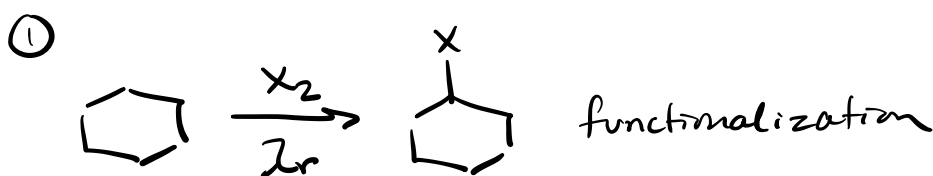


Radical Polymerization

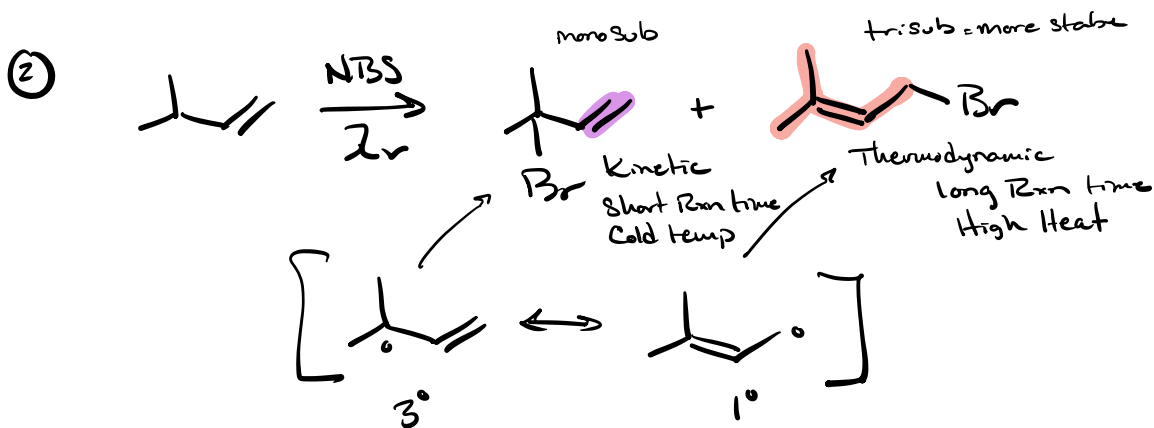


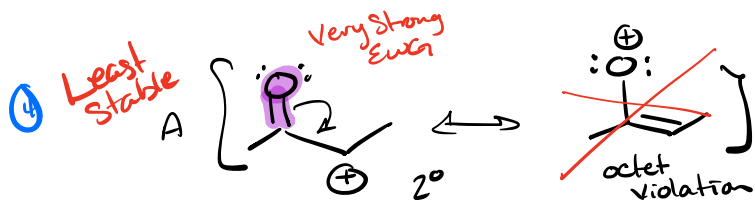


Synthetic Utility Punch line of Chapter

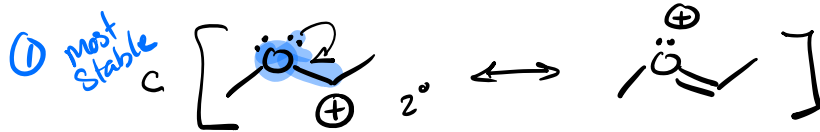
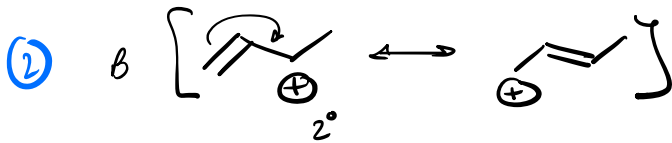


Zr is more selective than Cl

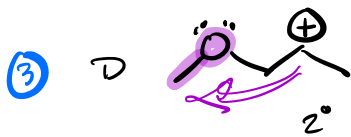




Carbonyl is strong EWG by induction



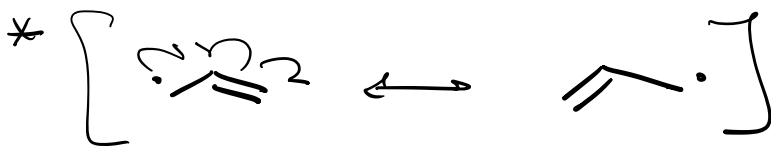
Oxygen is EDG by Resonance



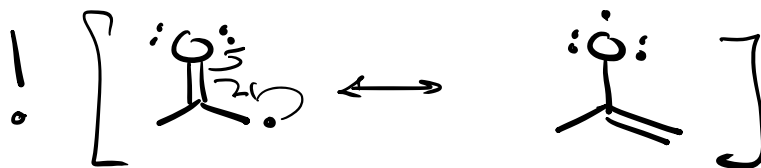
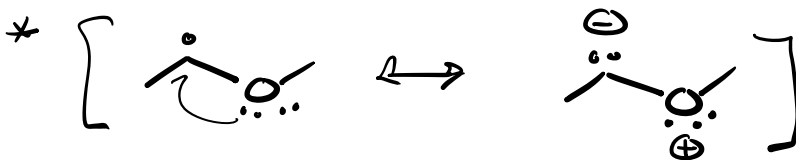
no Resonance & 2°

Oxygen as EWG by induction

Radical Stability



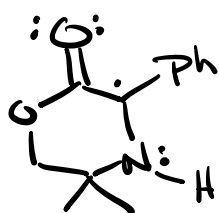
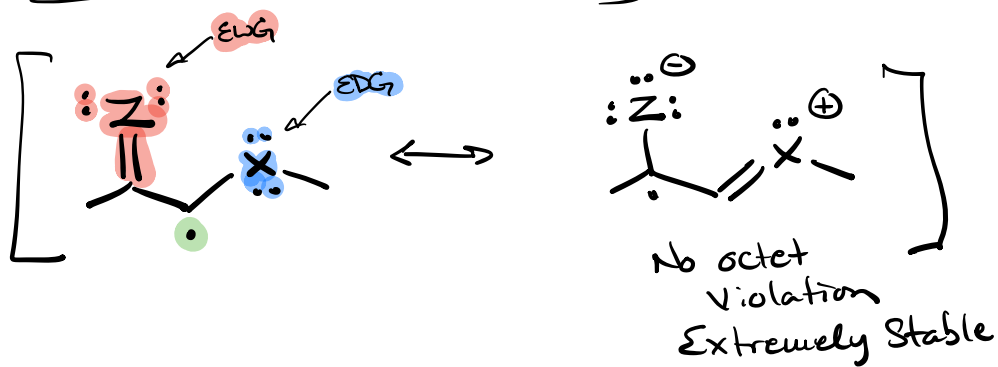
Just like above



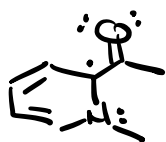
no octet violation
Carbonyl EDG by Resonance
Stabilizing for Radical

Radicals Stabilized by both EWG & EDG

most Stable Free Radical



Stable at room temp
for days



Very stable

Capto-dative Systems