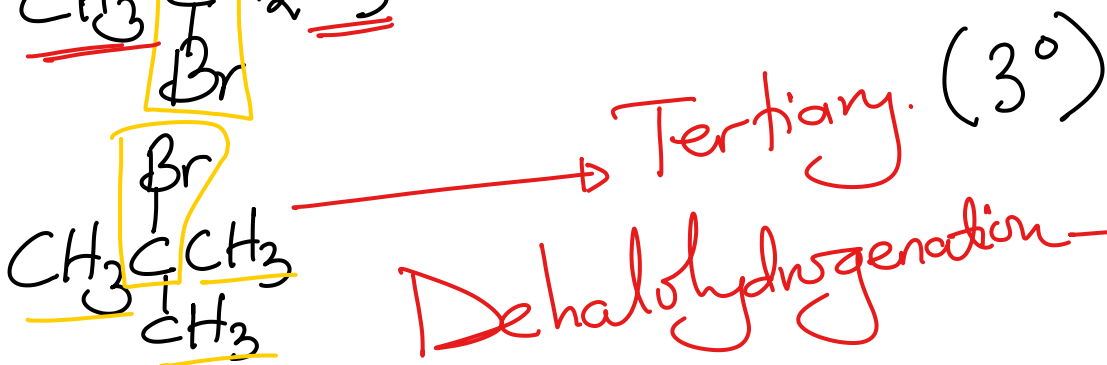
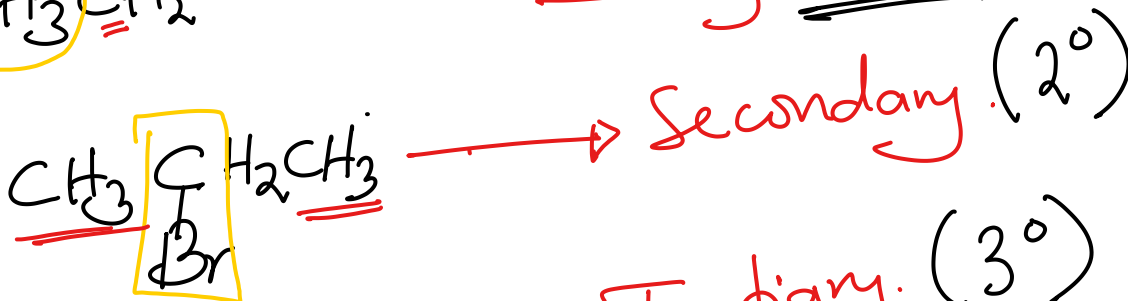
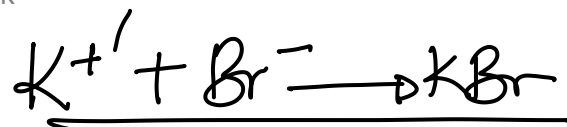
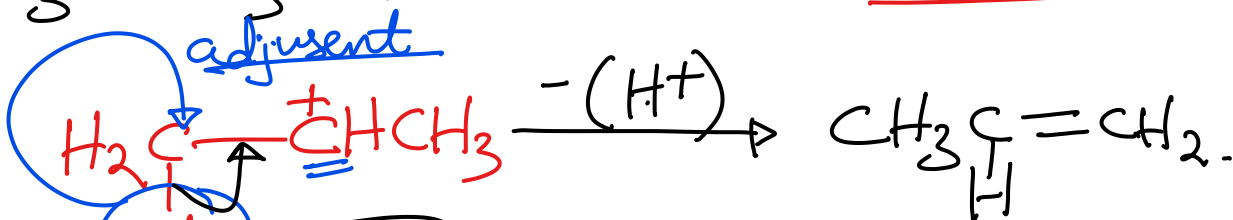
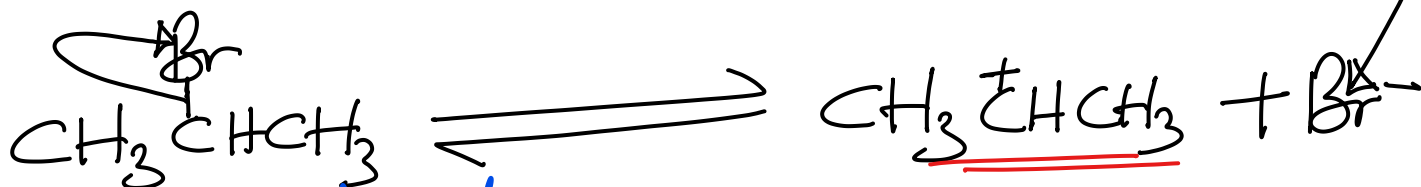


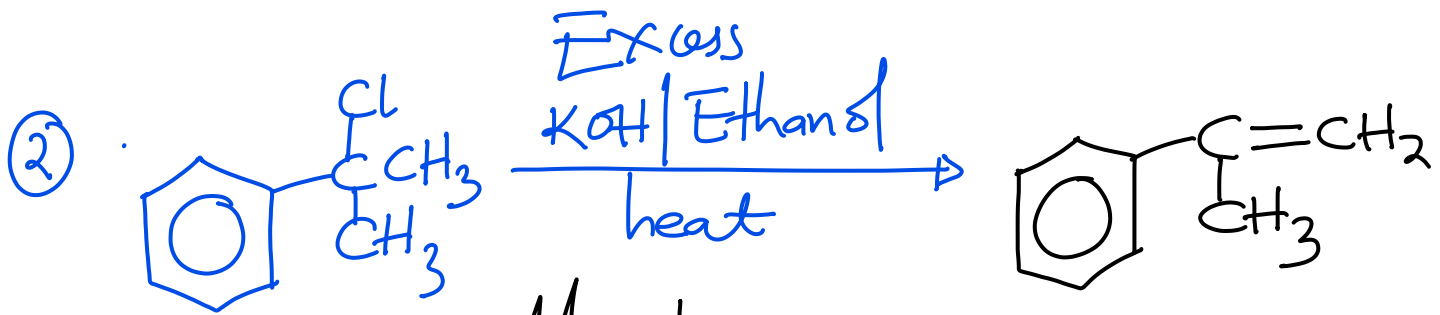
ALKENES

No. of alkyl groups attached C → 

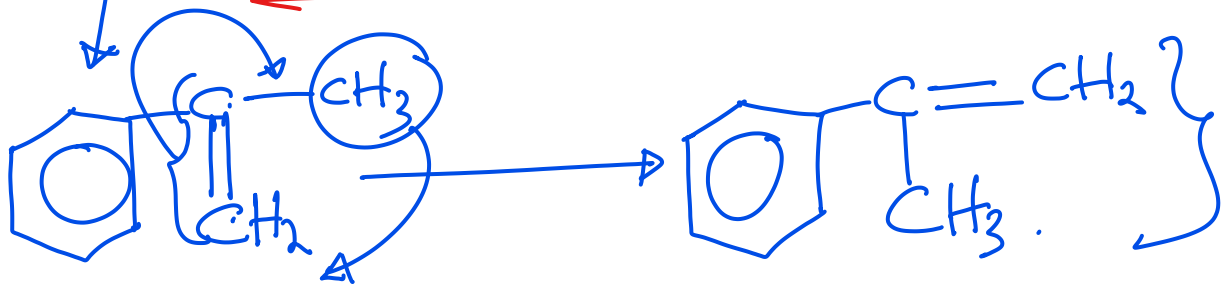
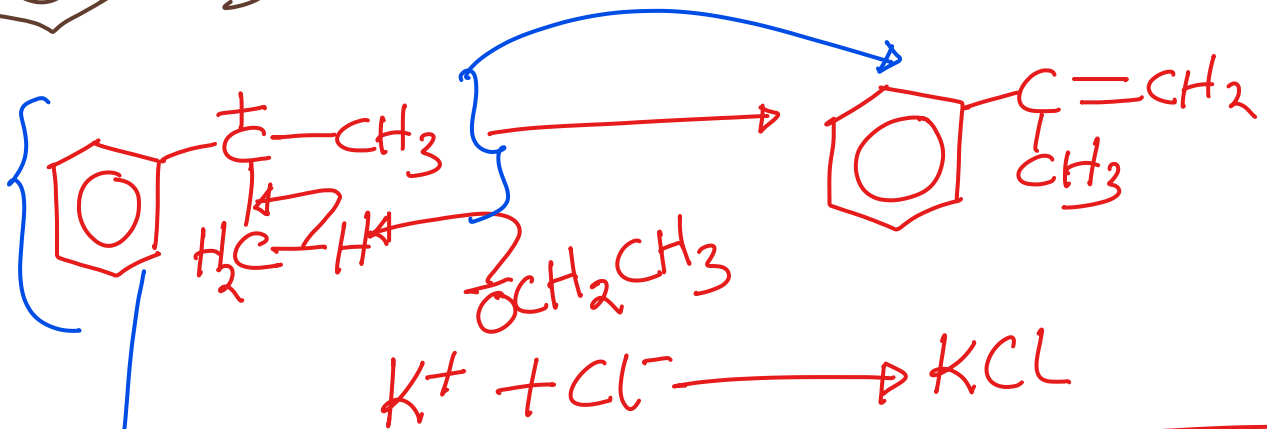
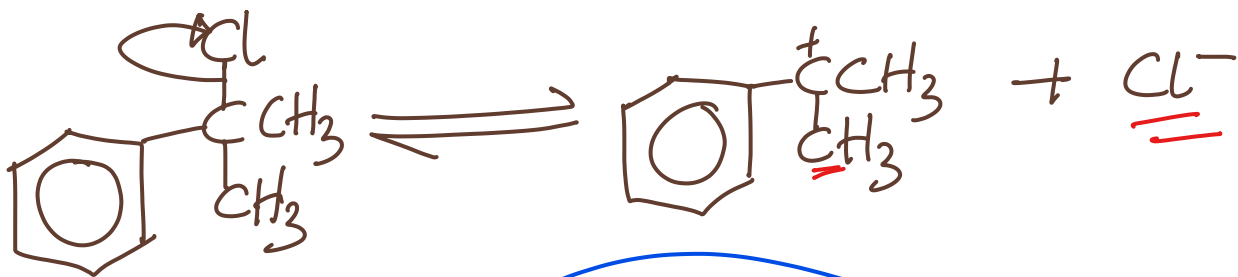


Dehalohydrogenation → (2° & 3°)

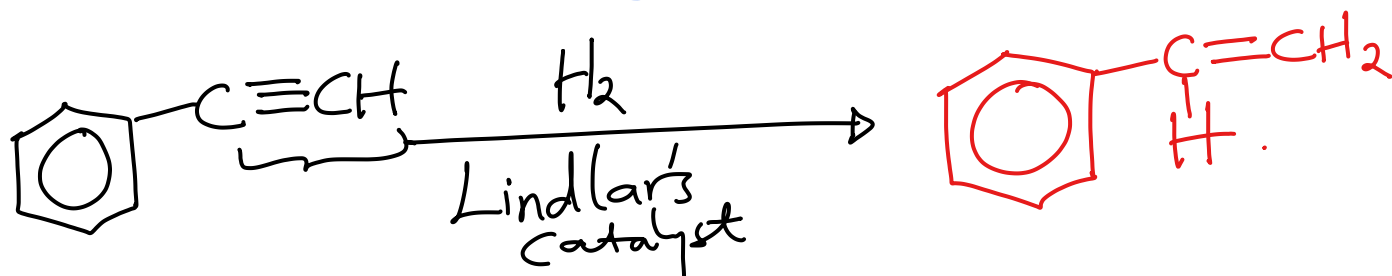
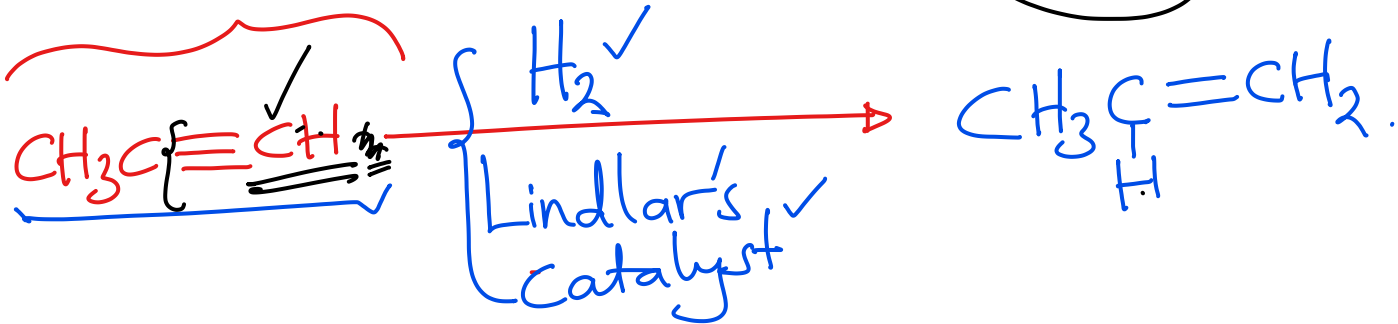




Mechanism



③ From alkynes →



~~Mechanism~~

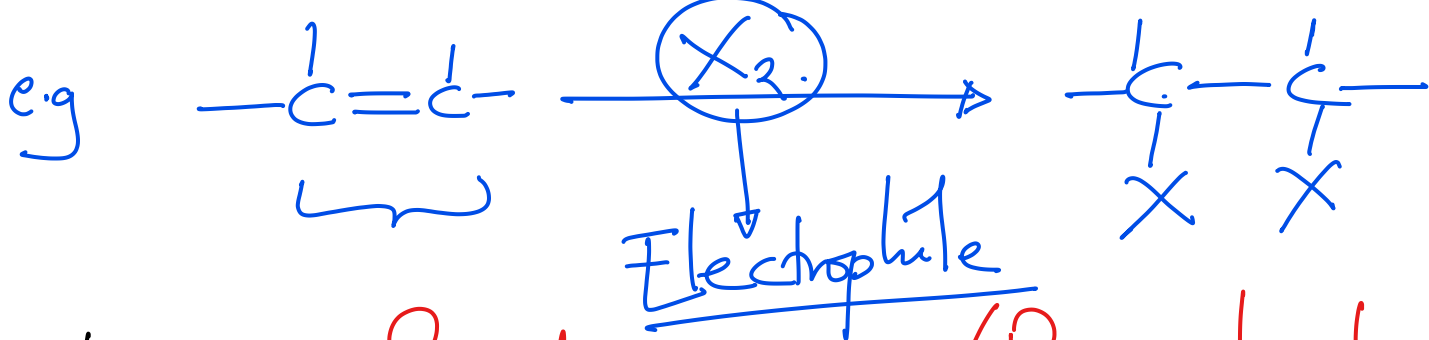
$\text{C} \rightarrow \left\{ \text{Maximum of 4 bonds.} \right\}$

Chemical Properties of alkenes

* (Electrophilic addition reaction.)

Electrophile → Electron deficient species.
∴ Electron loving.

Addition → Adding atom/group of atoms across an unsaturated double/triple bonds to form a saturated cpl.



Why?

* Alkenes have Carbon to Carbon Bond \rightarrow (Pair electron)

double bonds \rightarrow Source of electrons (π)

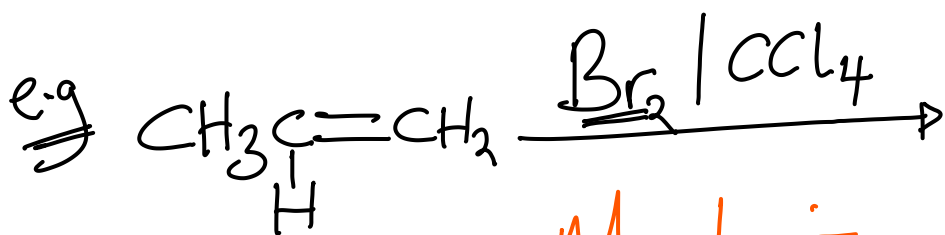
Centre of high density \rightarrow Easily attacked by electron deficient species

① Halogenation

(Halogens \rightarrow $\text{Cl}_2, \text{Br}_2, \text{I}_2$)

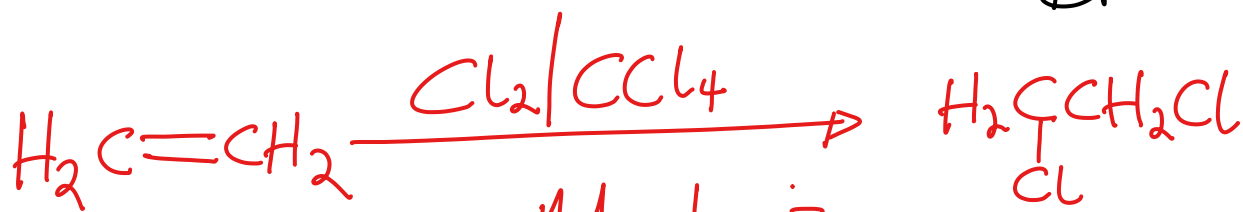
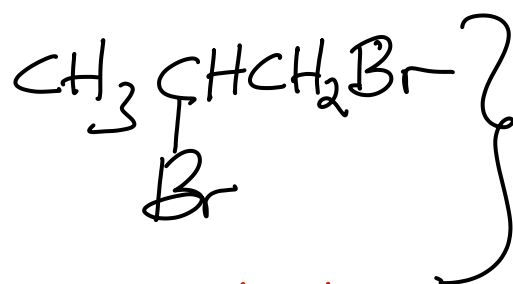
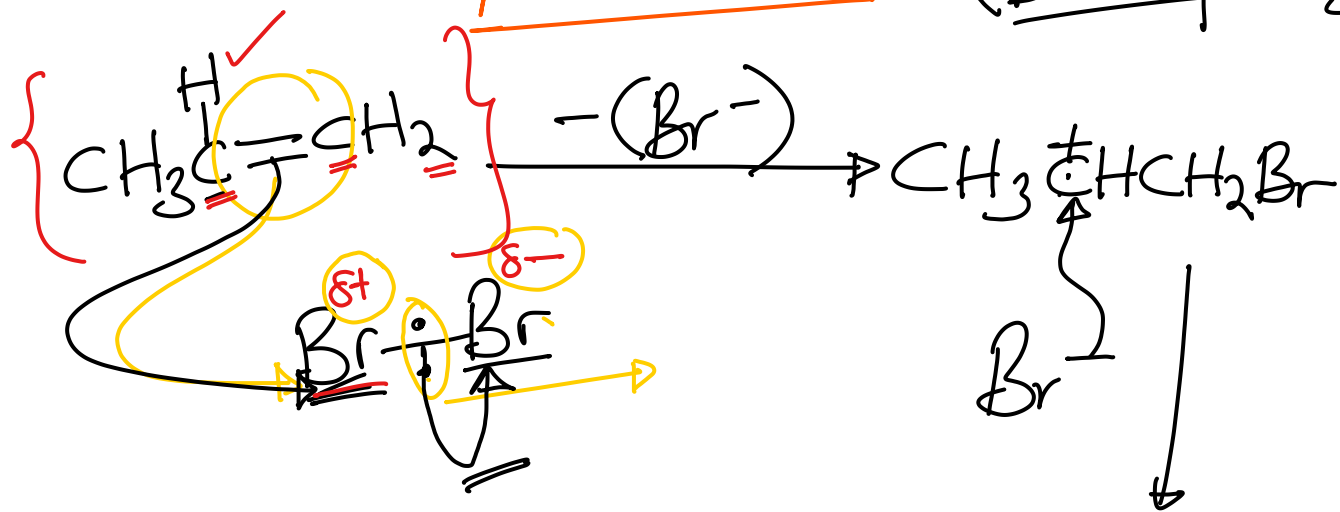
Takes in presence of carbon tetrachloride ✓
 (Tetrachloromethane - CCl_4)

Leads to formation of vicinal dihalides ✓

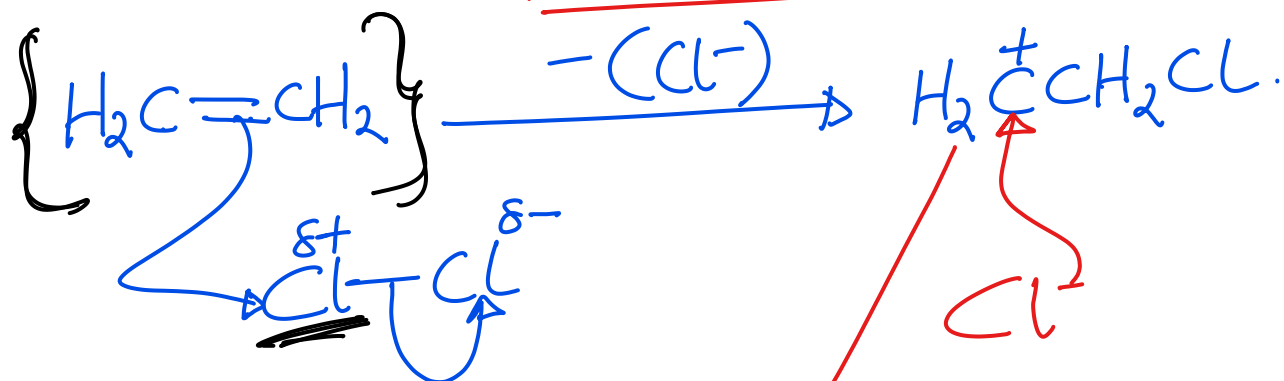


Mechanism

(Bond polarity)

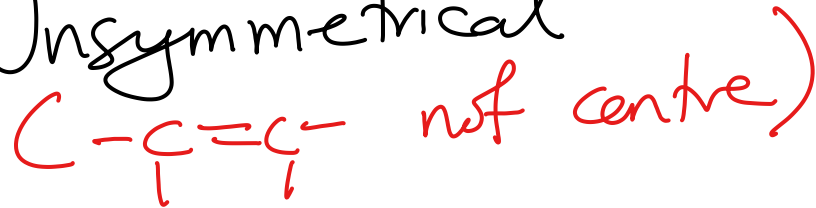


Mechanism



Markovnikov's rule of addition

↳ Unsymmetrical



It states that;

* The hydrogen atom attaches to the carbon atom that already has more hydrogen and the halide attaches to the carbon atom with fewer hydrogen.

(hydrogen halides)

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