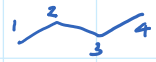
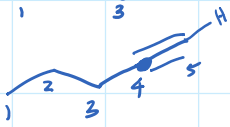
Alkenes and Alkynes

Saturday, March 13, 2021 4:46 PM



= alkane

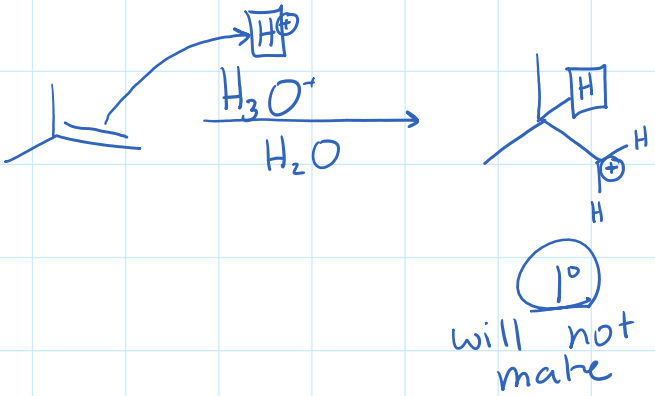
= alkene double bond, di, E

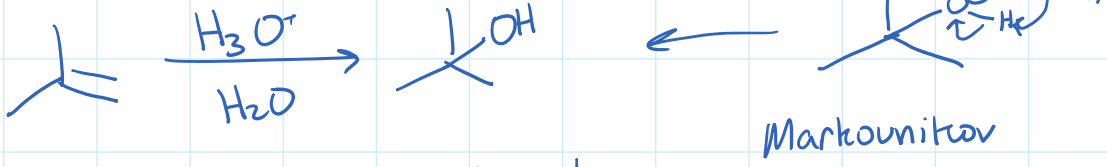


= alkyne = triple bond, 180°

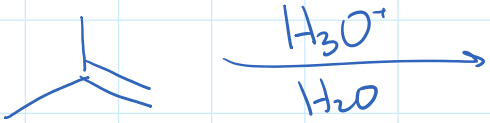
Alkene to Alcohol

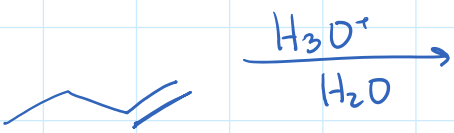
carbocation = C⊕

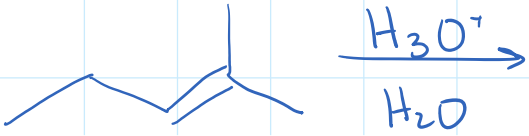




Markovnikov

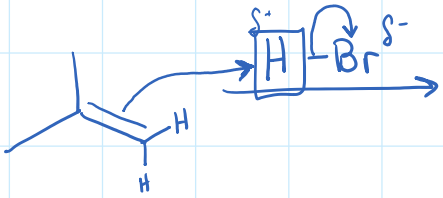


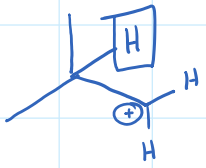




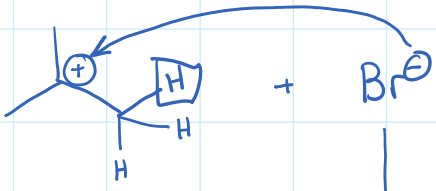
Alkene to Alkyl Halide

3>2>1





1° won't make

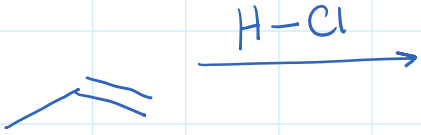


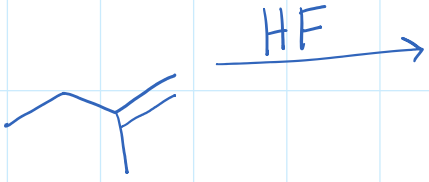
3° all this!

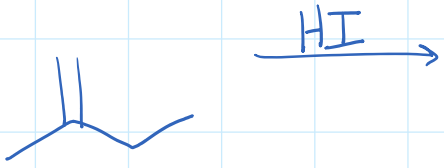
HCl, HBr, HF, HI

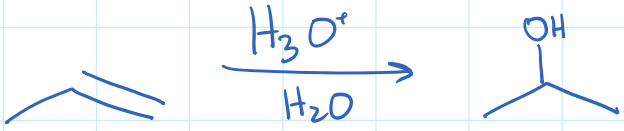
both R+S can be form

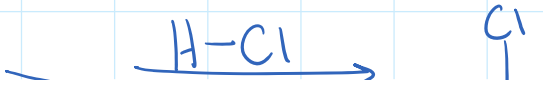
practice

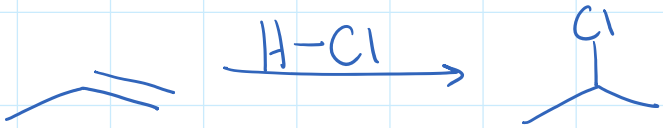




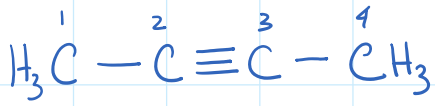




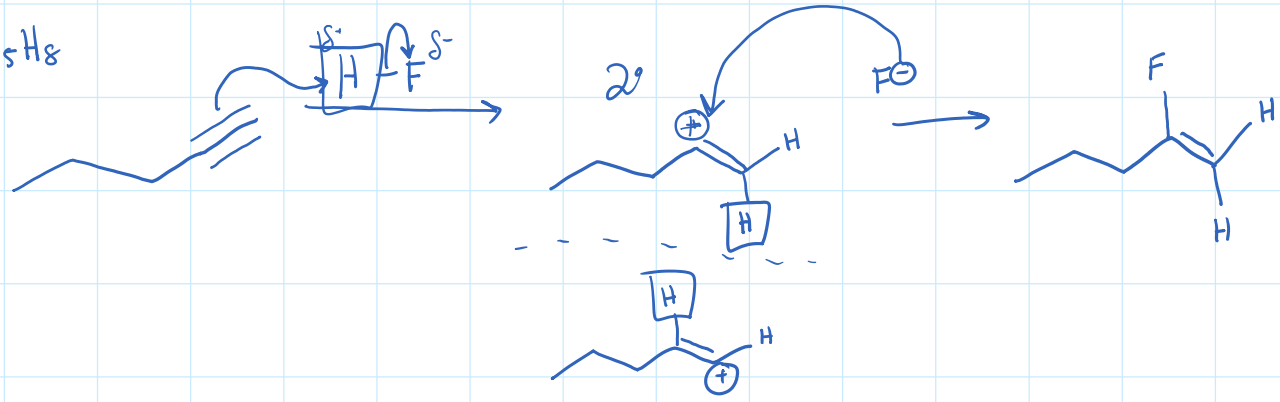




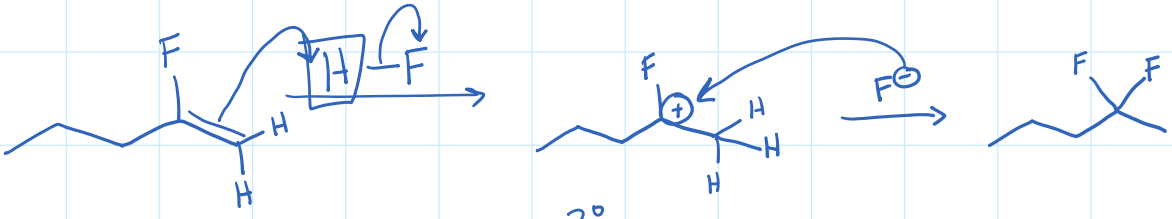
Alkynes



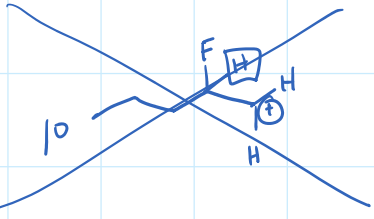
C_5H_8



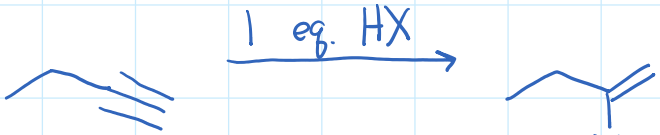
1° won't make this!



2°

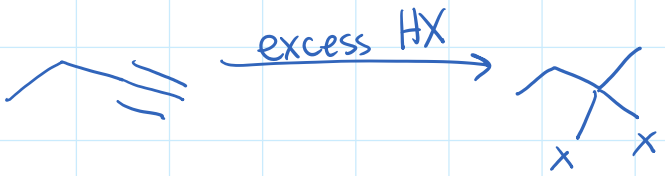


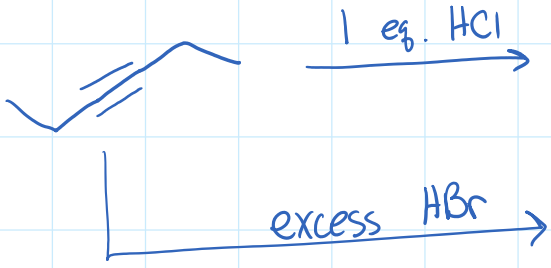
X = halogen

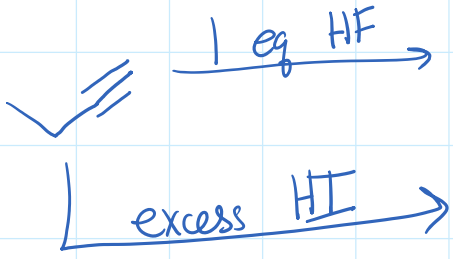


HX can be

HCl, HBr, HF, HI

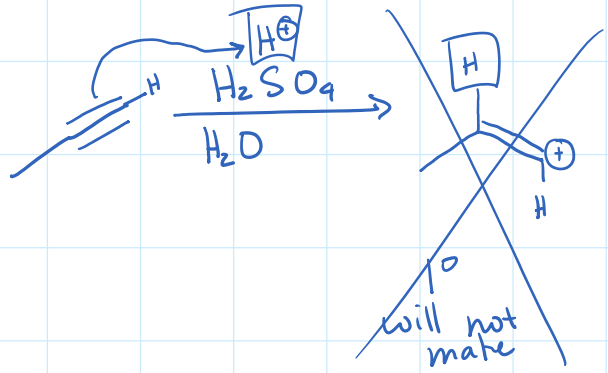


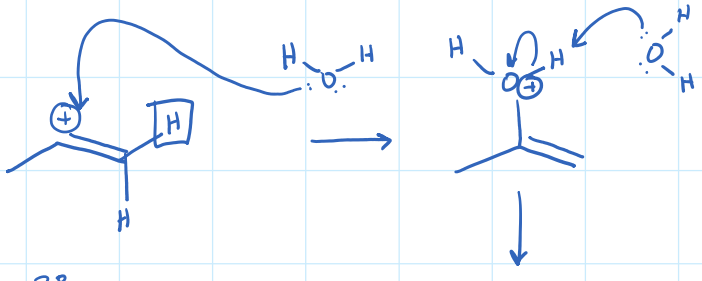


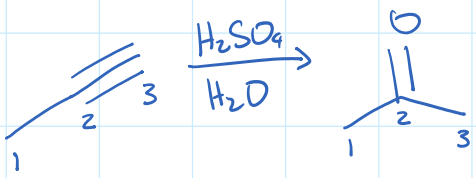


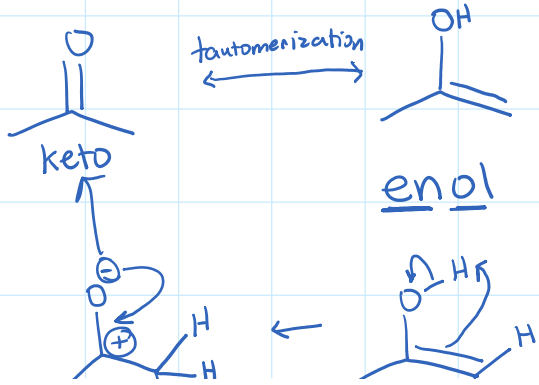
alkyne ⟶ carbonyl

$H_3C-C\equiv C-H$ =

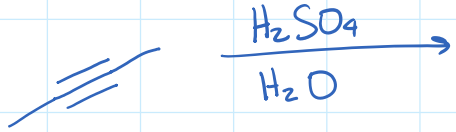


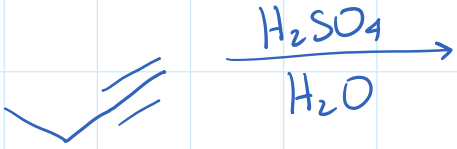






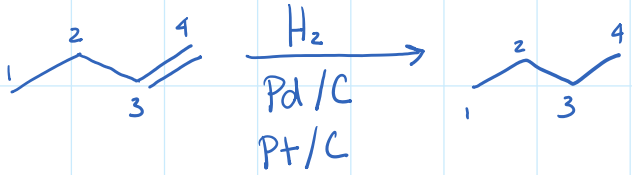
end → keto



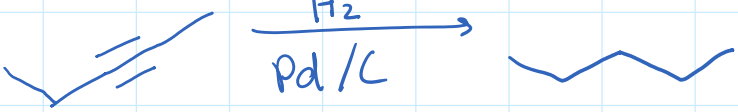


Hydrogenation = catalytic reduction

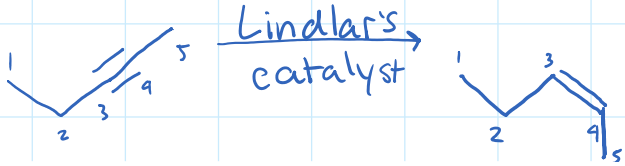
alkene → alkane



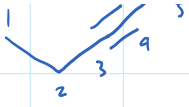
alkyne → alkane



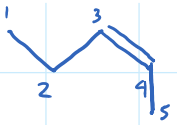
alkyne → alkene



Z alkene



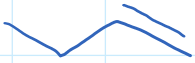
catalyst



Z alkene

$NaNH_3$

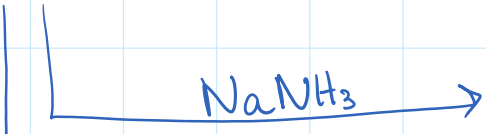
E alkene



H_2

Pt/C

Lindlar's



$NaNH_3$

H_2

Pd/C