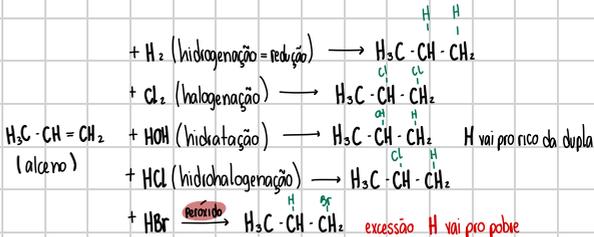


REAÇÕES ORGÂNICAS

revisão:

- cisão HOMOLÍTICA $\xrightarrow{\lambda}$ RADICAL LIVRE Δ
- cisão HETEROLÍTICA $\rightarrow A^+ + B^-$ (eletr. / nucleof.)



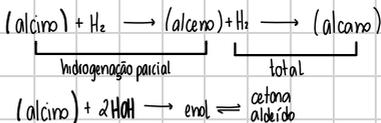
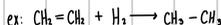
reagente = "ATAACA" substrato = "ATAACA" (orgânica)

→ dar para rico, roubar de pobre

1 ADIÇÃO (diminui insaturação)

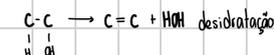
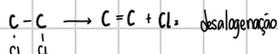
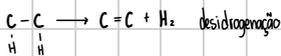
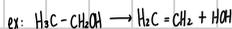
• adiciona átomos no substrato, que deve ser

insaturado



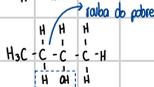
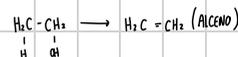
2 ELIMINAÇÃO (aumenta insaturação)

• retira átomos

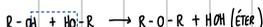


DESIDRATAÇÃO ALCÓIS

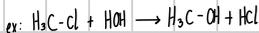
• Intramolecular



• Intermolecular

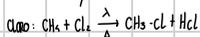


3 SUBSTITUIÇÃO (não altera saturação)



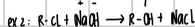
alcenos ou parafínicos (+ estáveis) = substituição

• Halogenação: *doação barreira, nitração (HNO3), sulfonação (H2SO4)*



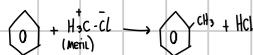
↳ O reagente entra no meio da molécula no átomo ligado

↳ menos HOMOGENEUS *subst. nucleofílica*

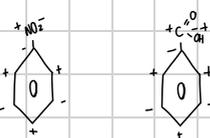
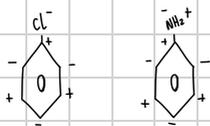


aromáticos (+ estáveis)

↳ excesso de e⁻, o reagente eletrofílico (+) ataca

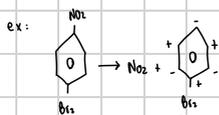
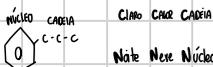


REGRAS DOS SINAIS: quem ataca é + e vai pro -



metil = alquila :: adaptação de FRIEDEL-CRAFT

acilação ocorre com AÍLAS



 + 1º grupo \rightarrow qualquer lugar

2º grupo \rightarrow orientado pelo 1º

ativante: joga e⁻ (+m) = orto/para
 desativante: tira e⁻ (-m) = meta
 ss lig. simples