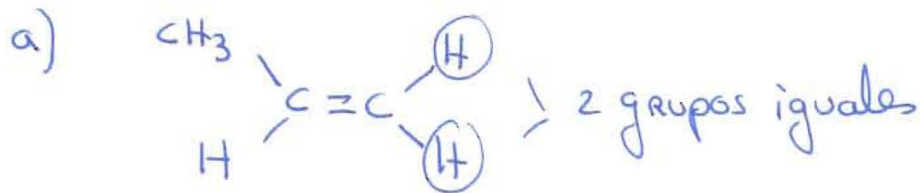
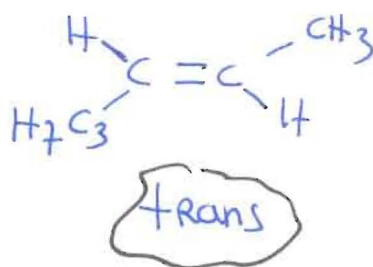
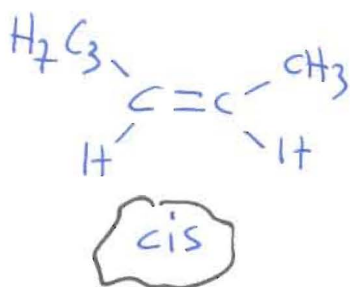
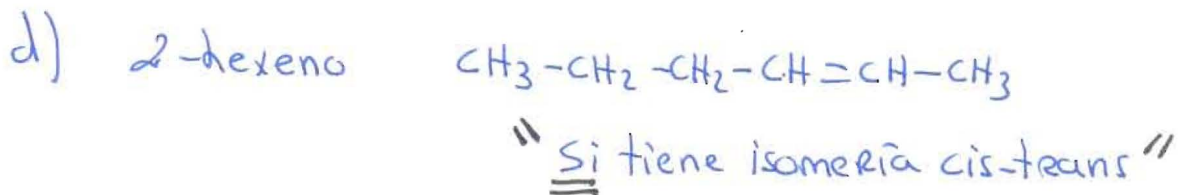
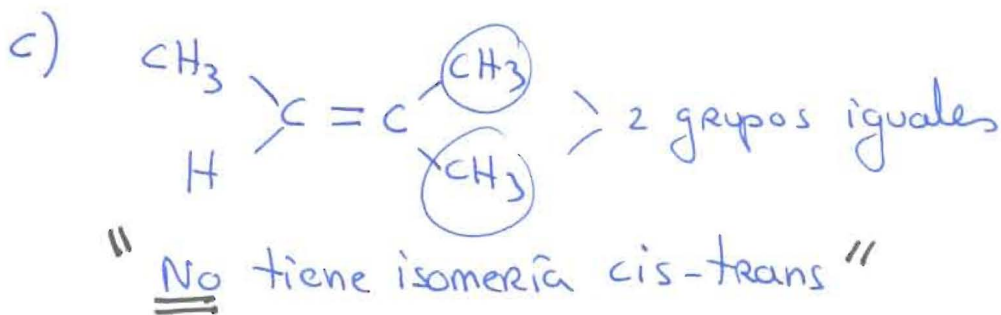
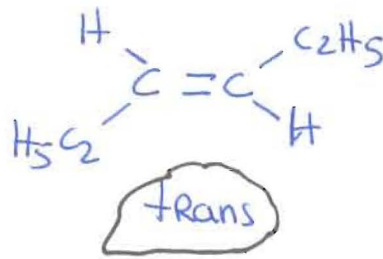
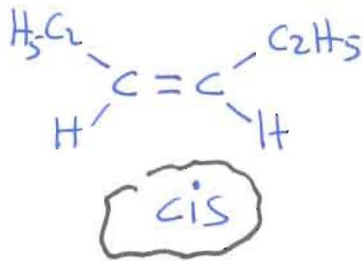
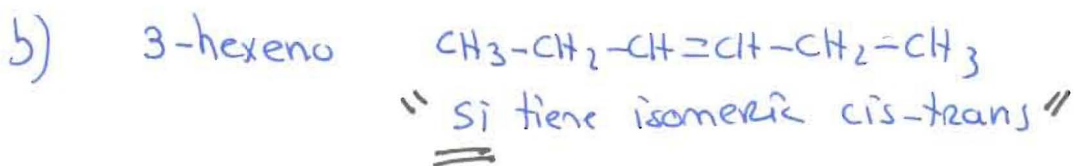


# Soluciones Tema 4 (1ª parte)

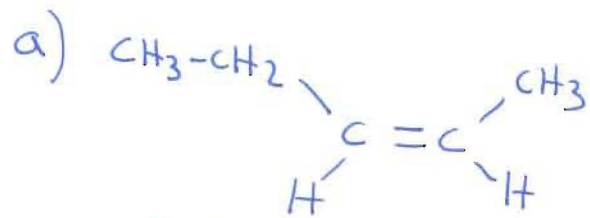
Problema 4.1. -



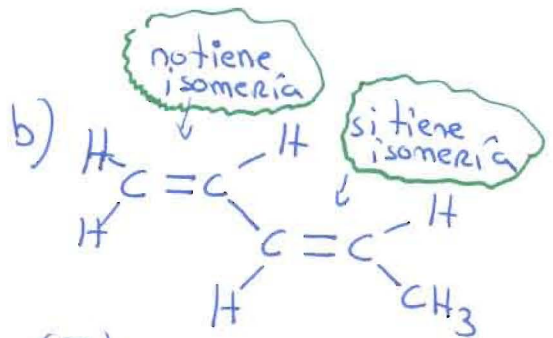
"No tiene isomería cis-trans"



Problema 4.2.-

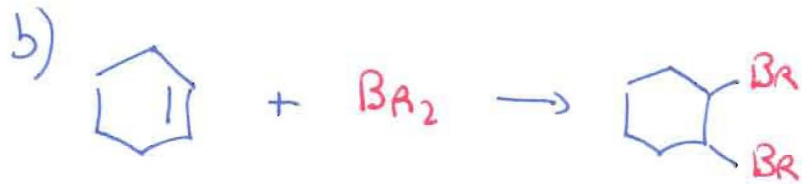
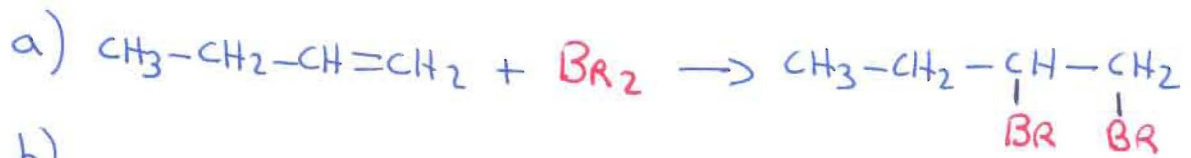


(Z)-2-penteno

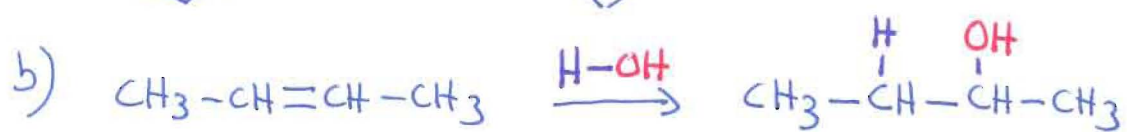
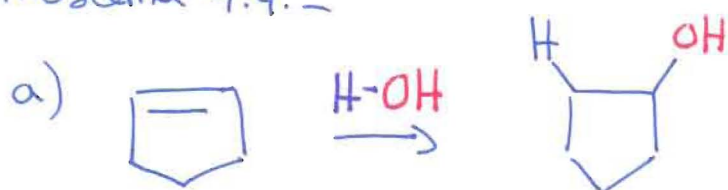


(E)-1,3-pentadieno

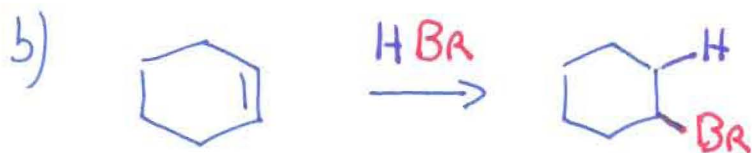
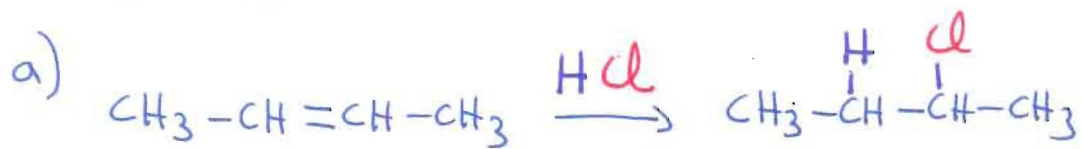
Problema 4.3.-



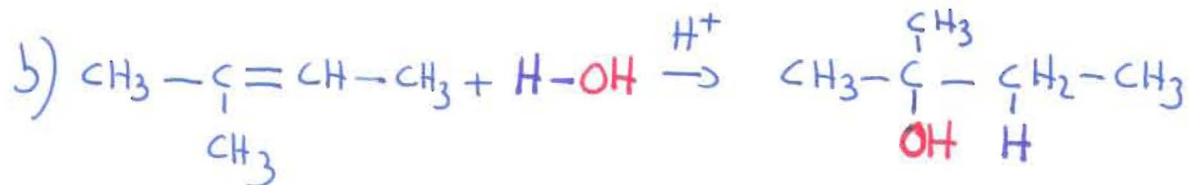
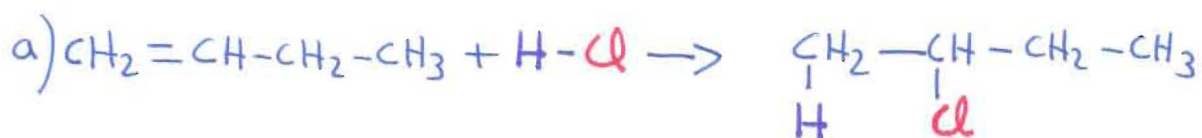
Problema 4.4.-



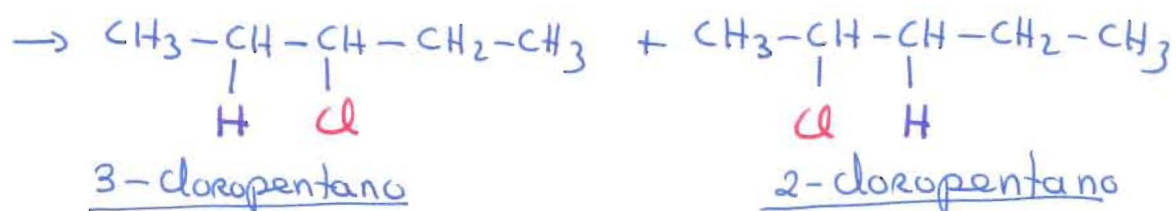
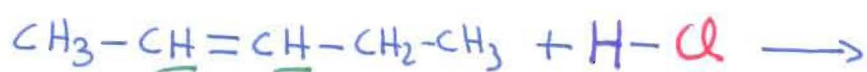
Problema 4.5.-



## Problema 4.6

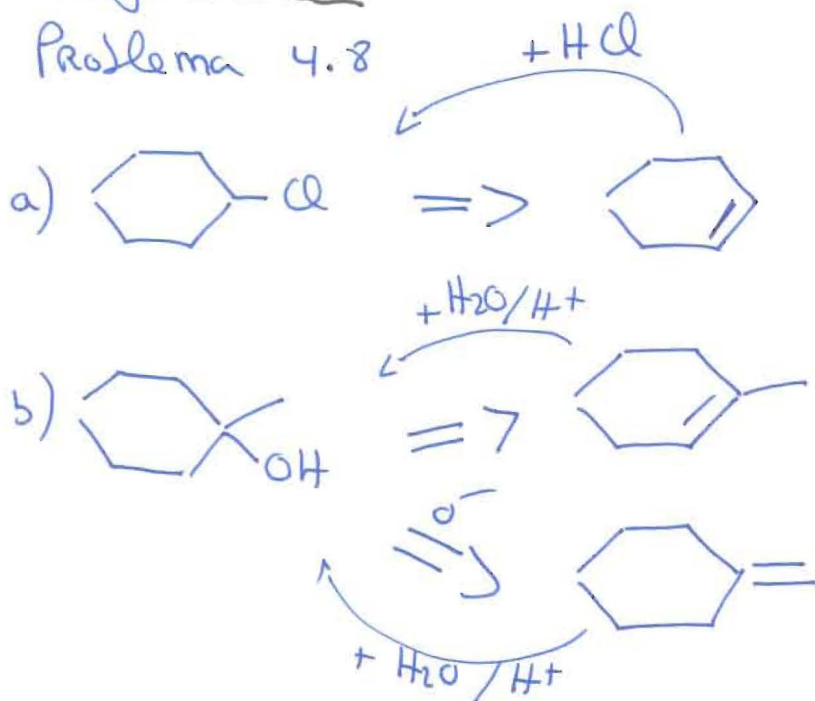


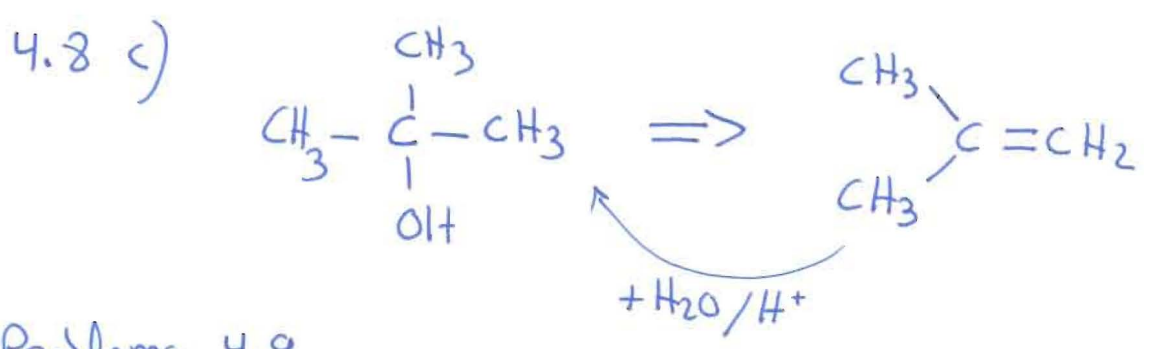
## Problema 4.7



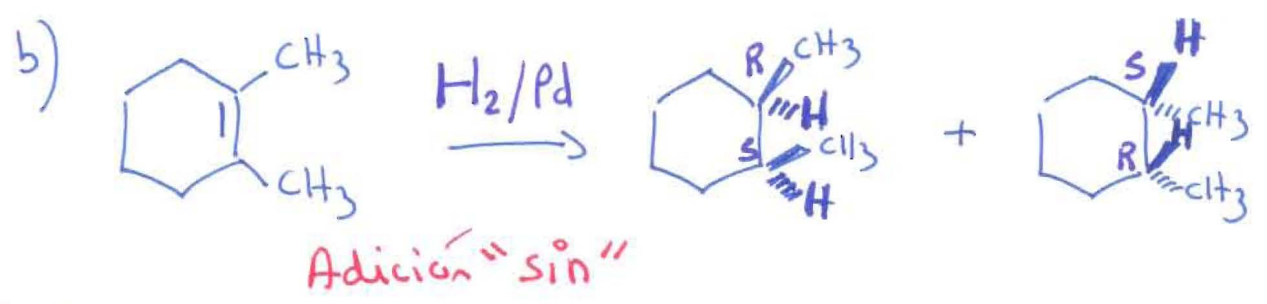
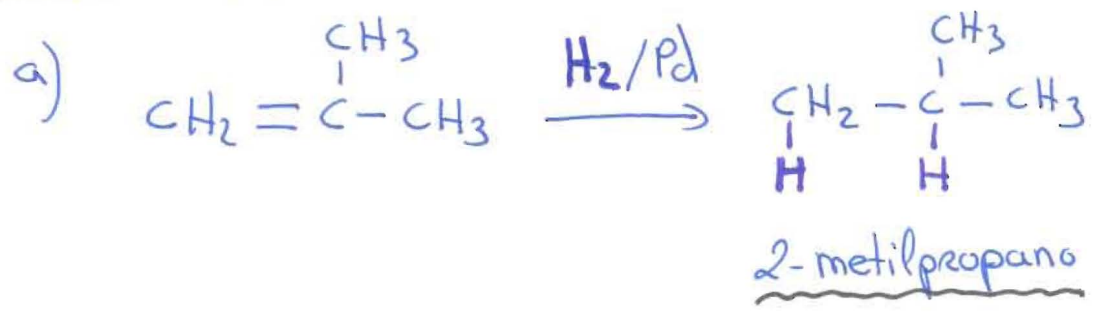
Como los dos carbonos del doble enlace tienen el mismo n.º de hidrógenos no hay preferencia " No es Regioselectiva "

## Problema 4.8

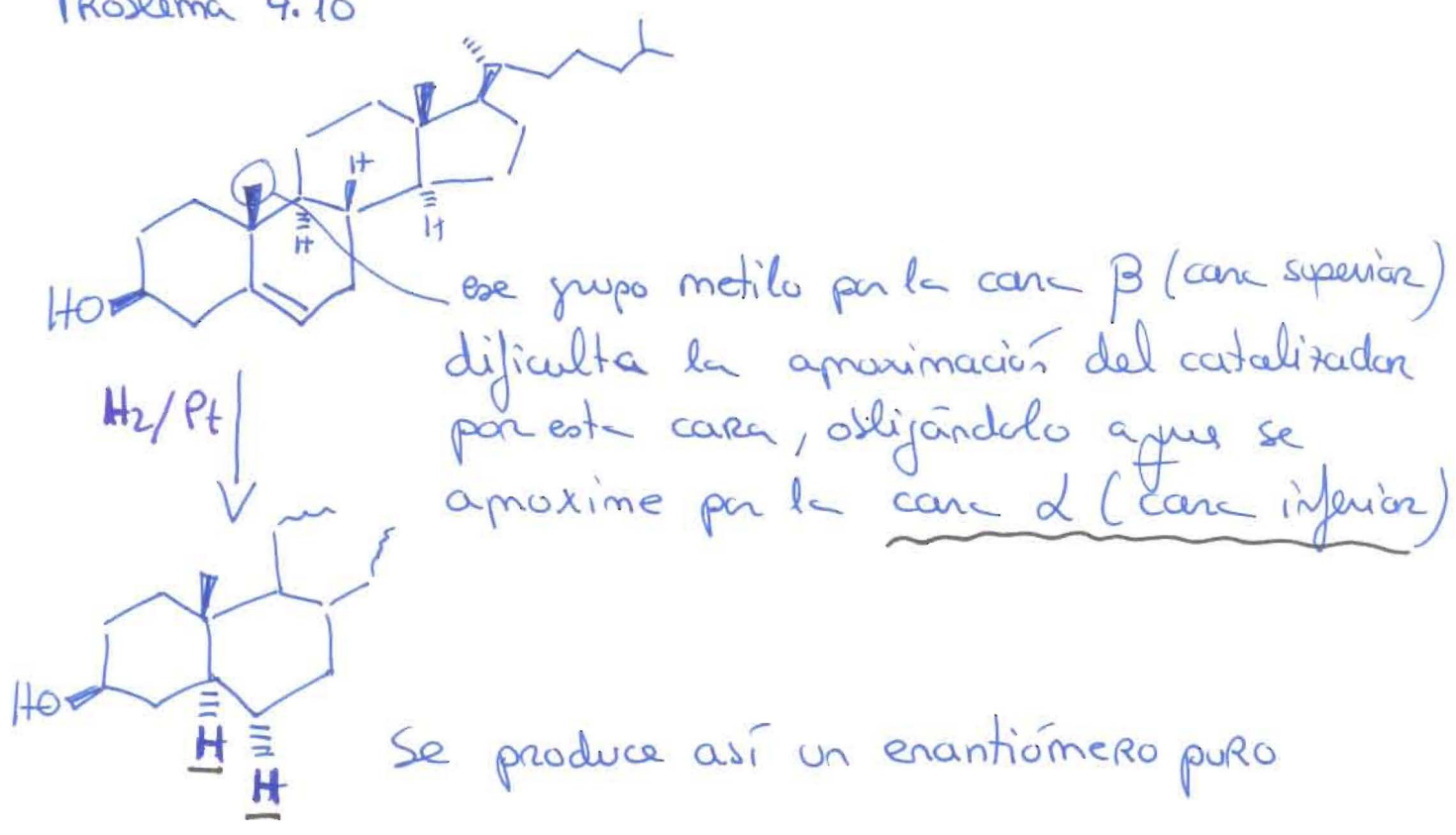




Problema 4.9



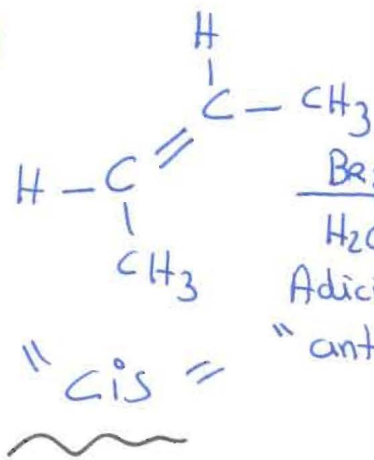
Problema 4.10



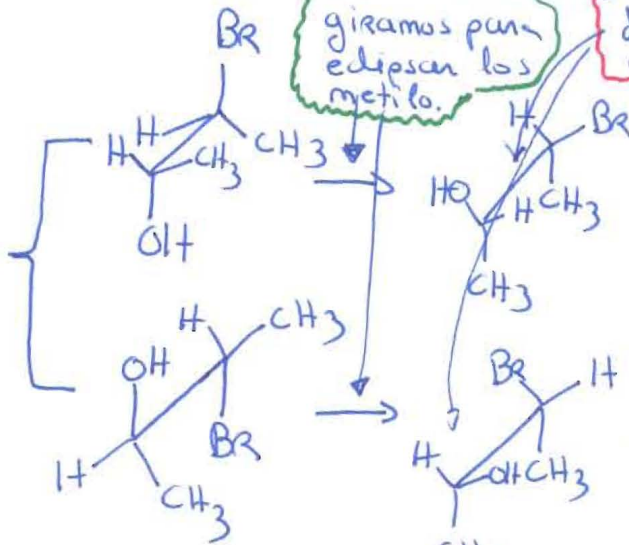


# Problema 4.11

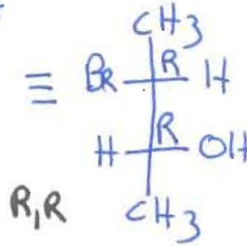
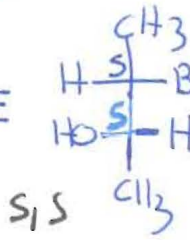
a)



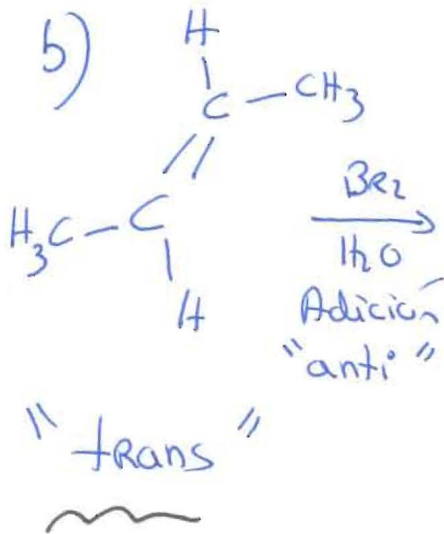
$\xrightarrow[\text{H}_2\text{O}]{\text{Br}_2}$   
 Adición "anti"



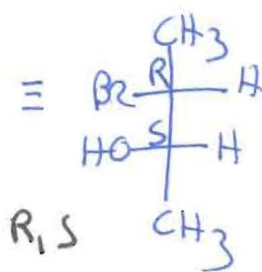
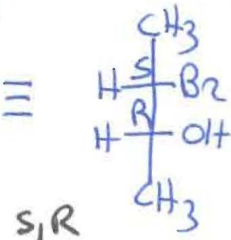
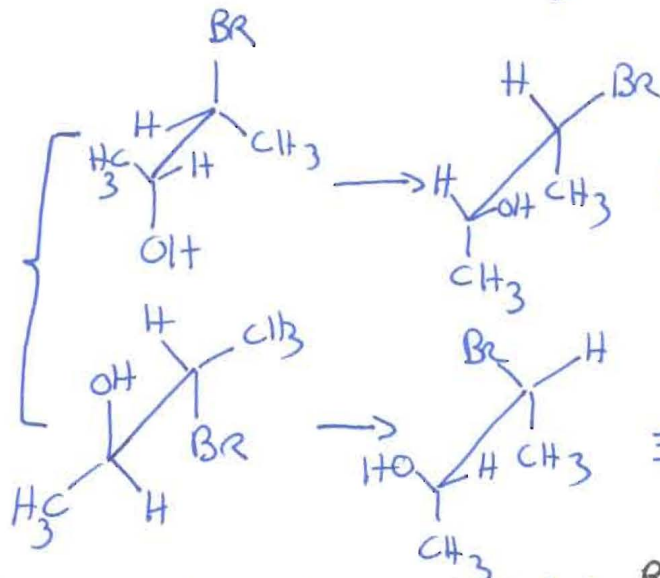
si miramos desde arriba



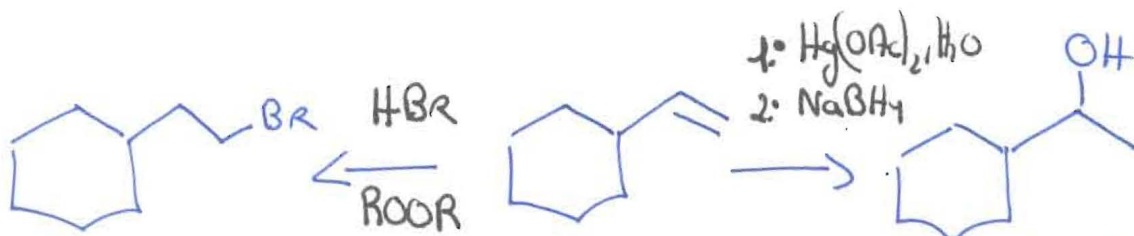
b)



$\xrightarrow[\text{H}_2\text{O}]{\text{Br}_2}$   
 Adición "anti"



# Problema 4.13 (el 4.12 está en la siguiente hoja)



Producto de adición antimarkovnikov

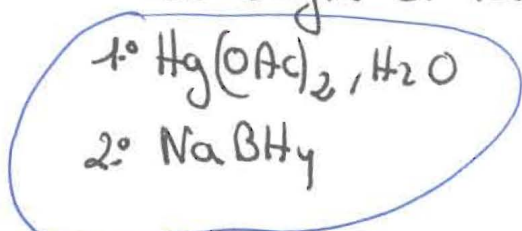
Debo elegir el reactivo



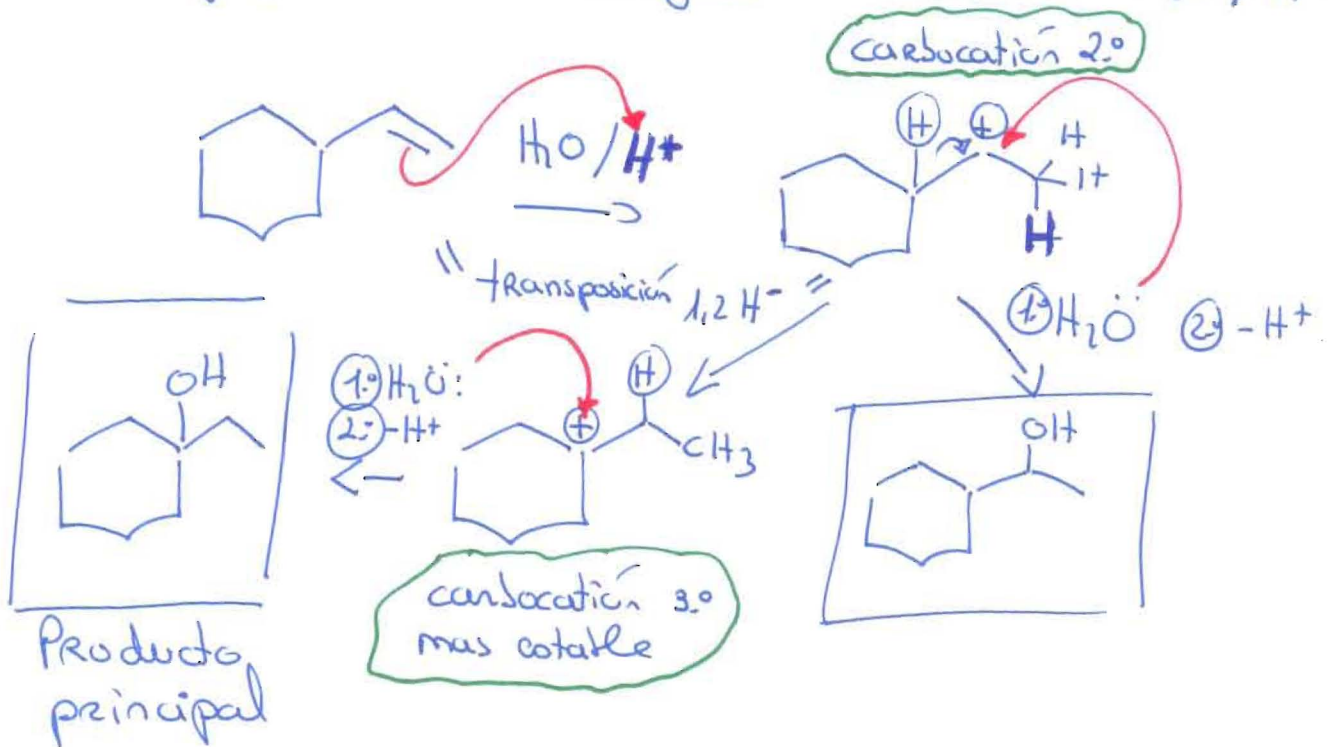
Adición Radicalaria

Producto de adición de H<sub>2</sub>O Markovnikov y sin transposiciones

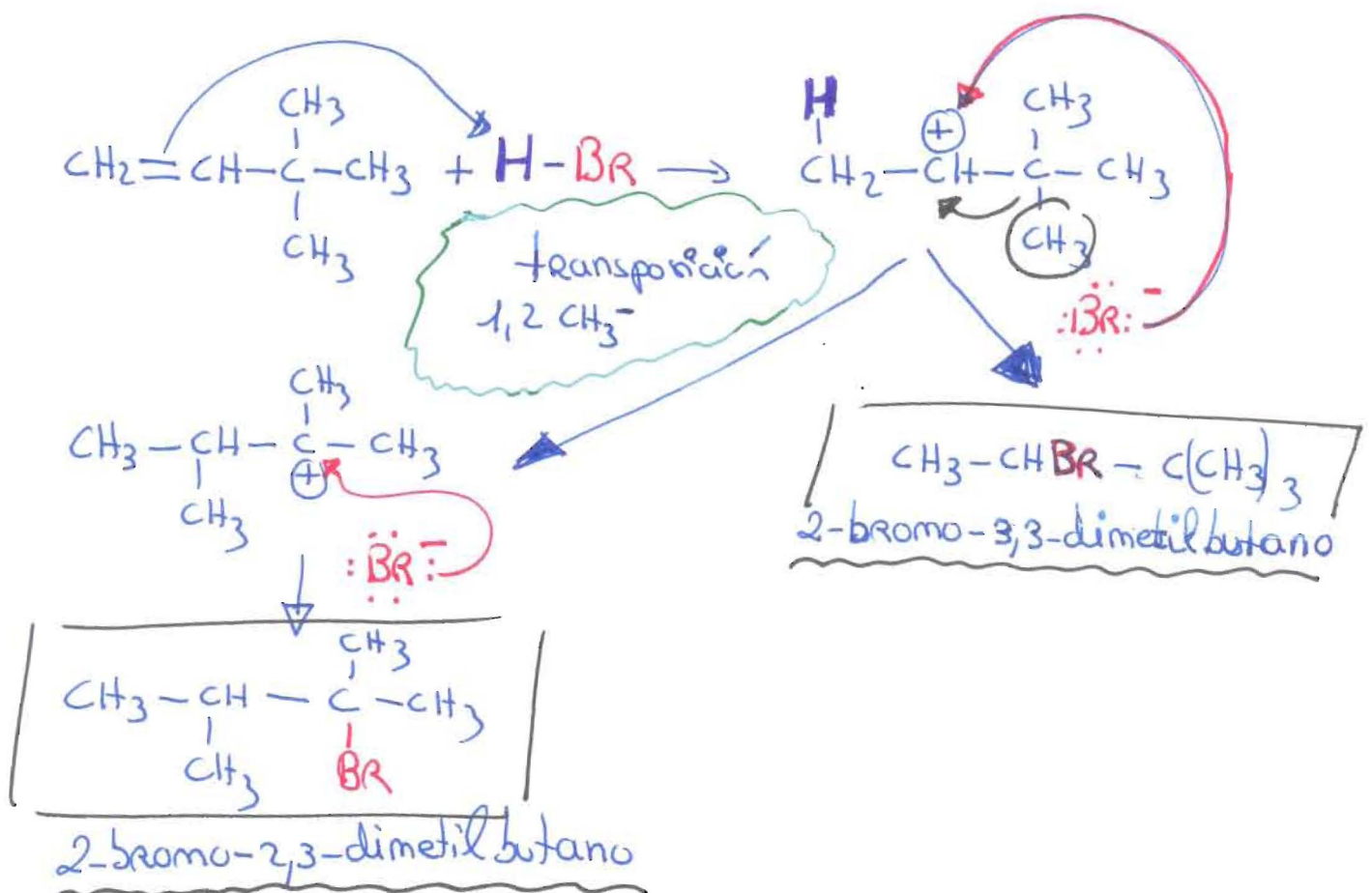
Debo elegir el reactivo



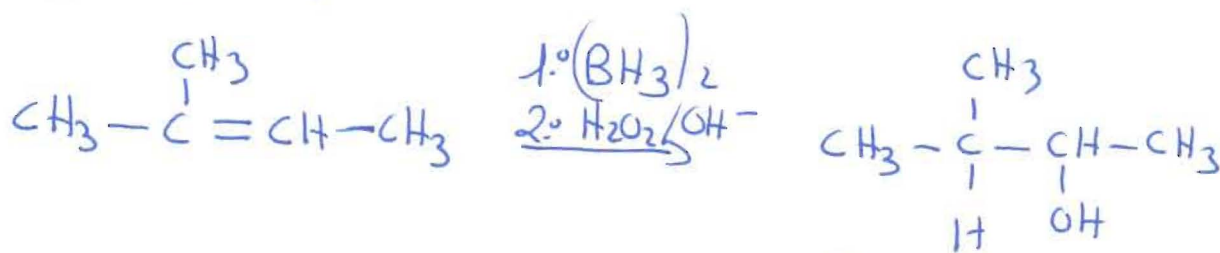
¡Ojo! si hubiera elegido el reactivo  $H_2O/H^+$



Problema 4.12

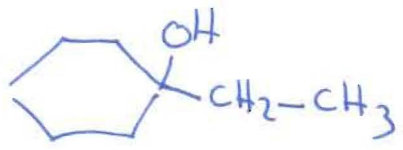
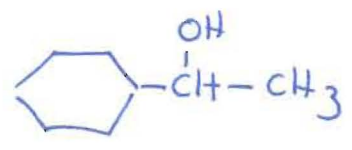
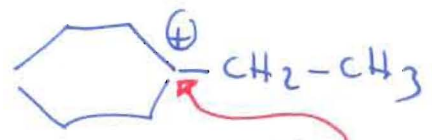
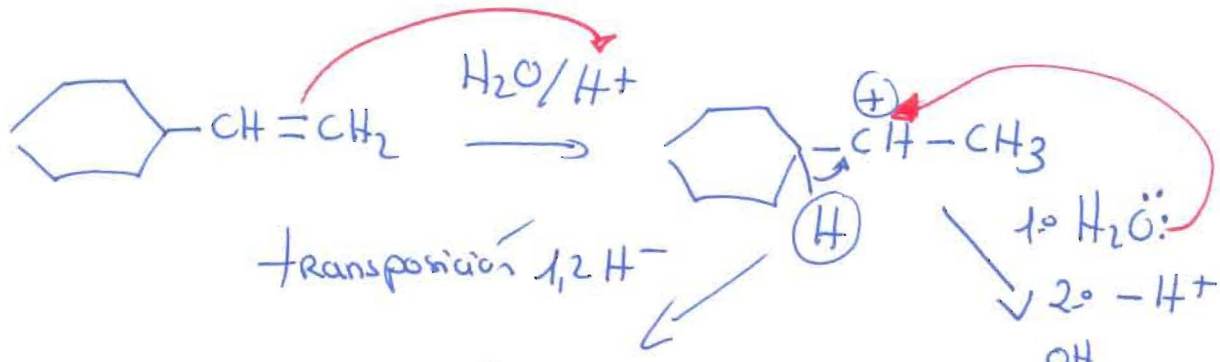
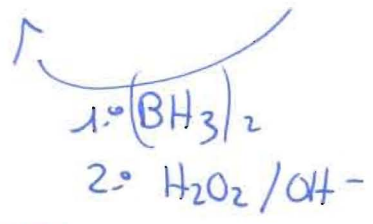
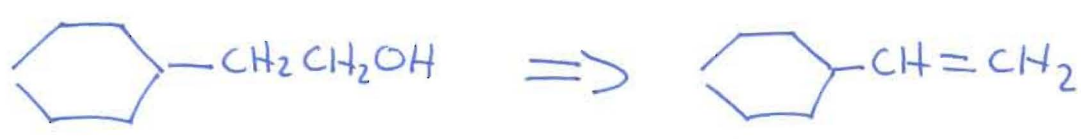


Problema 4.14



Producto AntiMarkov

Problema 4.15



Producto mayoritario

Problema 4.16

