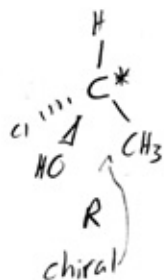
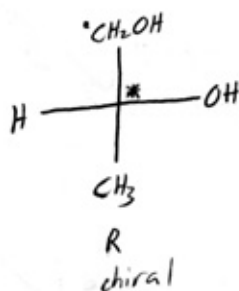


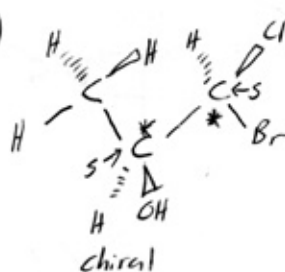
1. a)



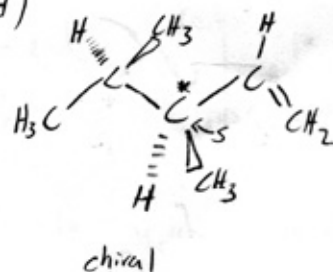
b)



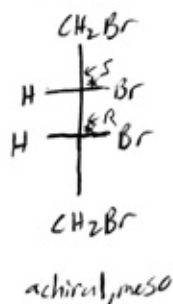
c)



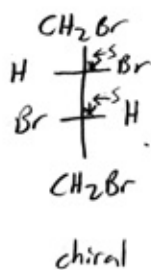
d)



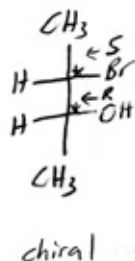
e)



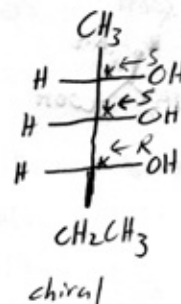
f)



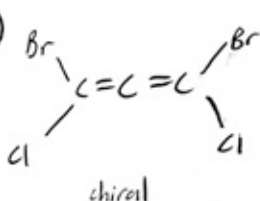
g)



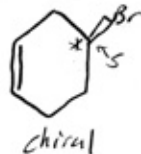
h)



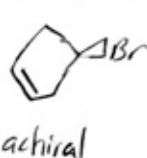
i)



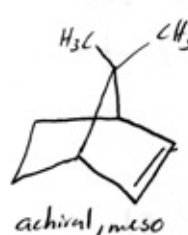
j)



k)



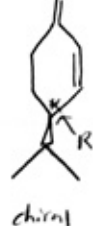
l)



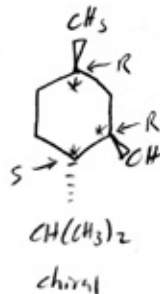
m)



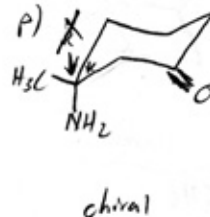
n)



o)

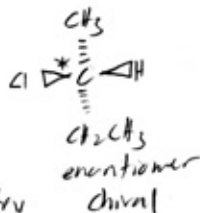
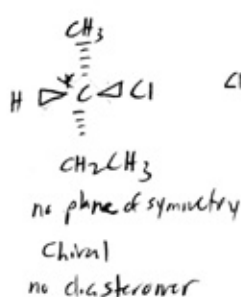


p)

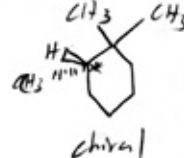
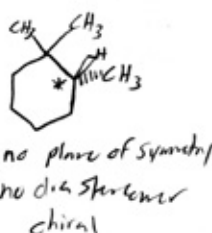


2.

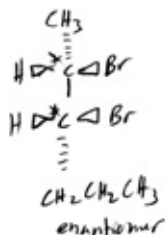
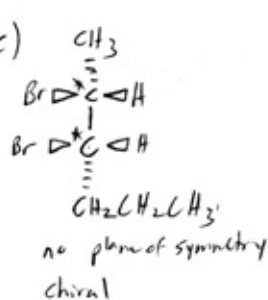
a)



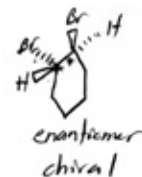
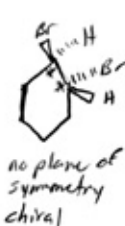
b)



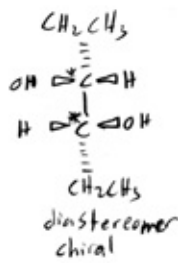
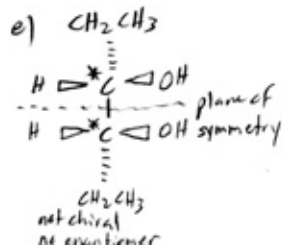
c)



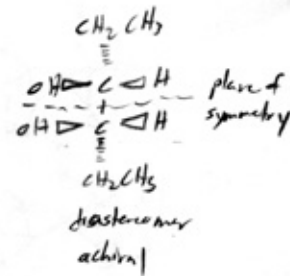
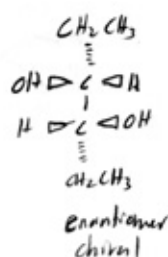
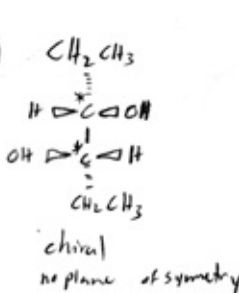
d)

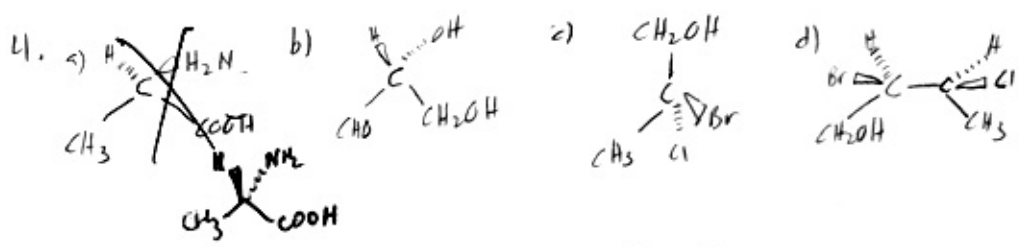
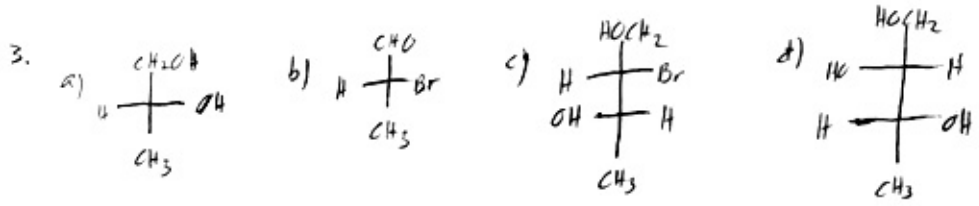


e)

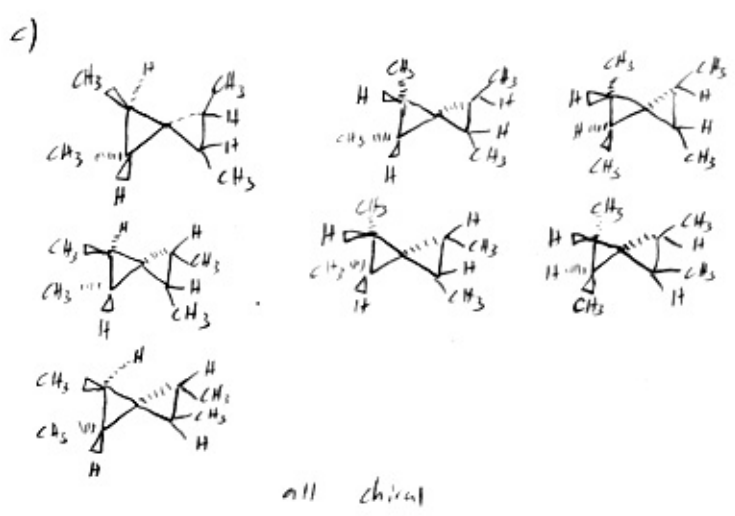
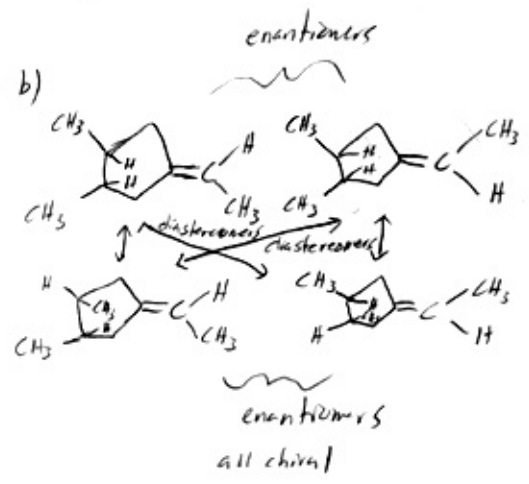
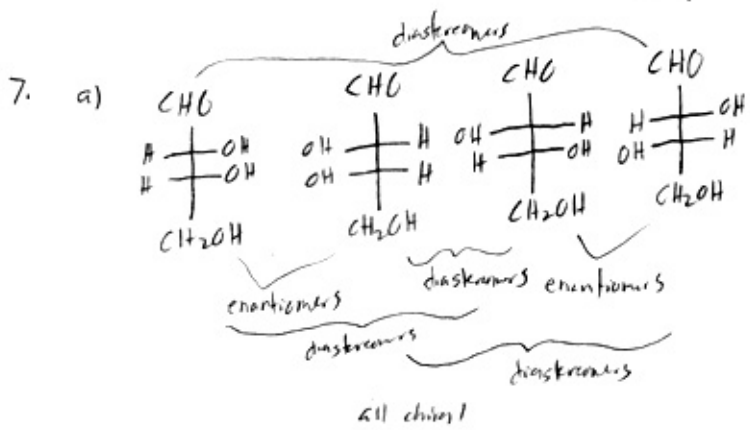
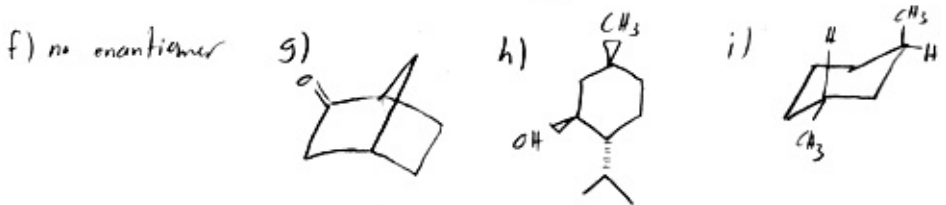
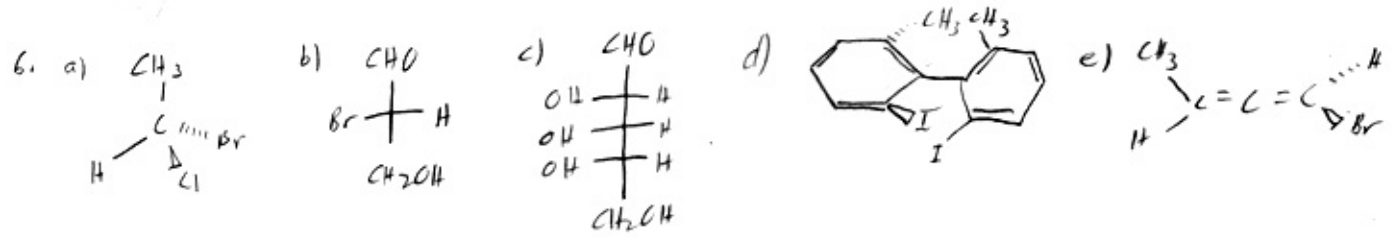


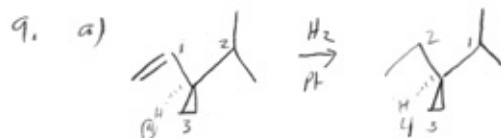
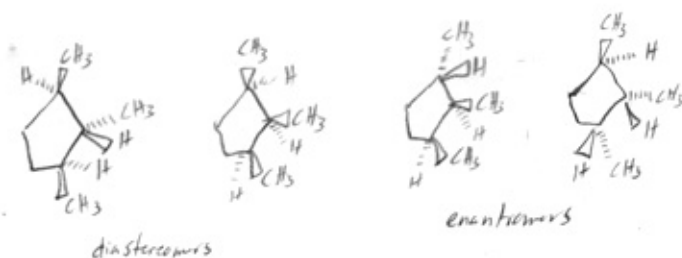
f)





5. a) same compound d) enantiomers g) enantiomers
 b) enantiomers e) enantiomers h) same compound
 c) enantiomers f) diastereomers





b) No, it changes because of the breaking of the double bond

c) R and S don't have much to do with optical rotation



* = stereocenter

b) yes, because it's chiral

c) no, because it would be racemic