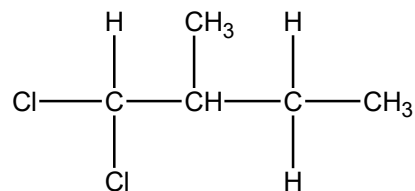
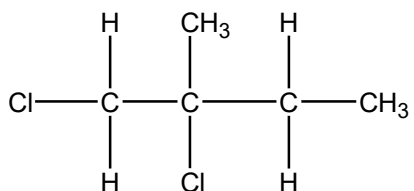


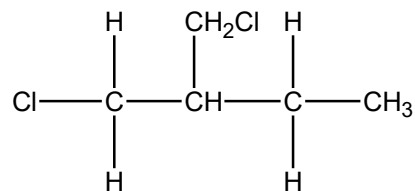
Starting material, chiral, optically active



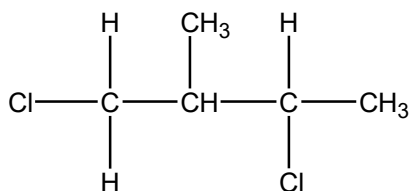
Did not break any bonds to the chiral center, configuration retained, optically active



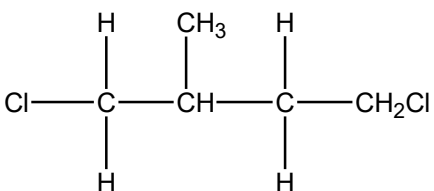
Broke the bond to the chiral center, racemic (50:50) mixture of R and S, optically inactive (cancel each other out)



No longer a chiral compound, optically inactive



A new chiral center is formed, two products formed, diastereomers, optically active



Did not break any bonds to the chiral center, configuration retained, optically active