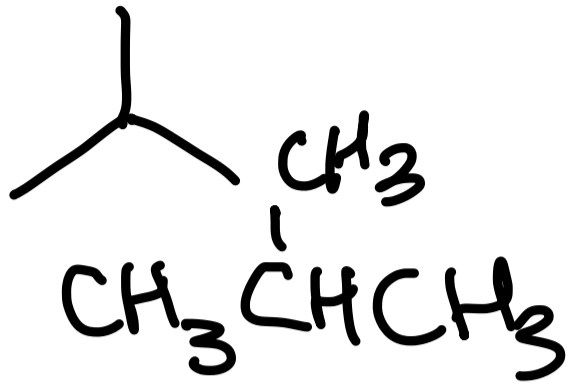
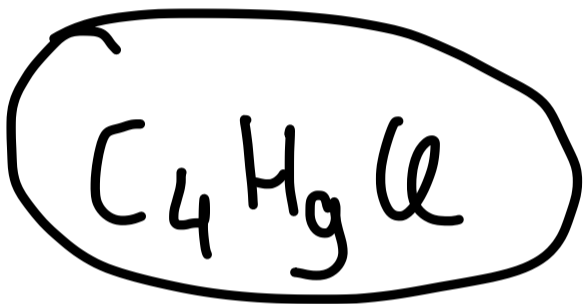


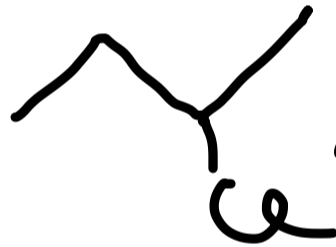
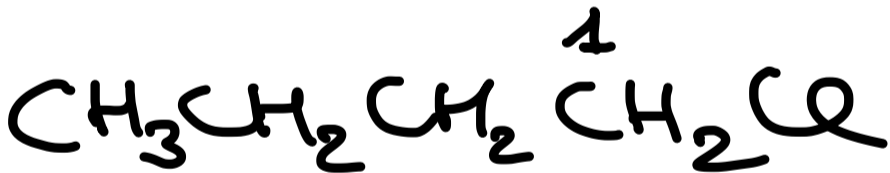
butano



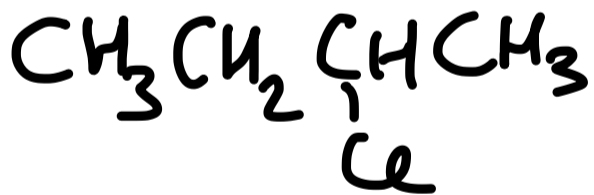
2-metil-propano



1-cloro-butano



2-cloro-butano



STEREOMERISMI

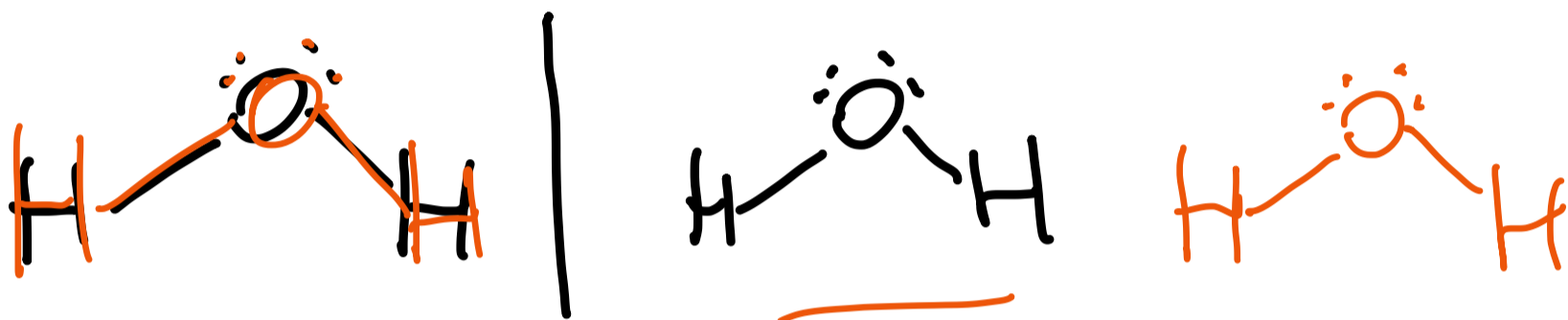
ENANTIOMERI

DIASTEREOMERI

CONFIGURAZIONE

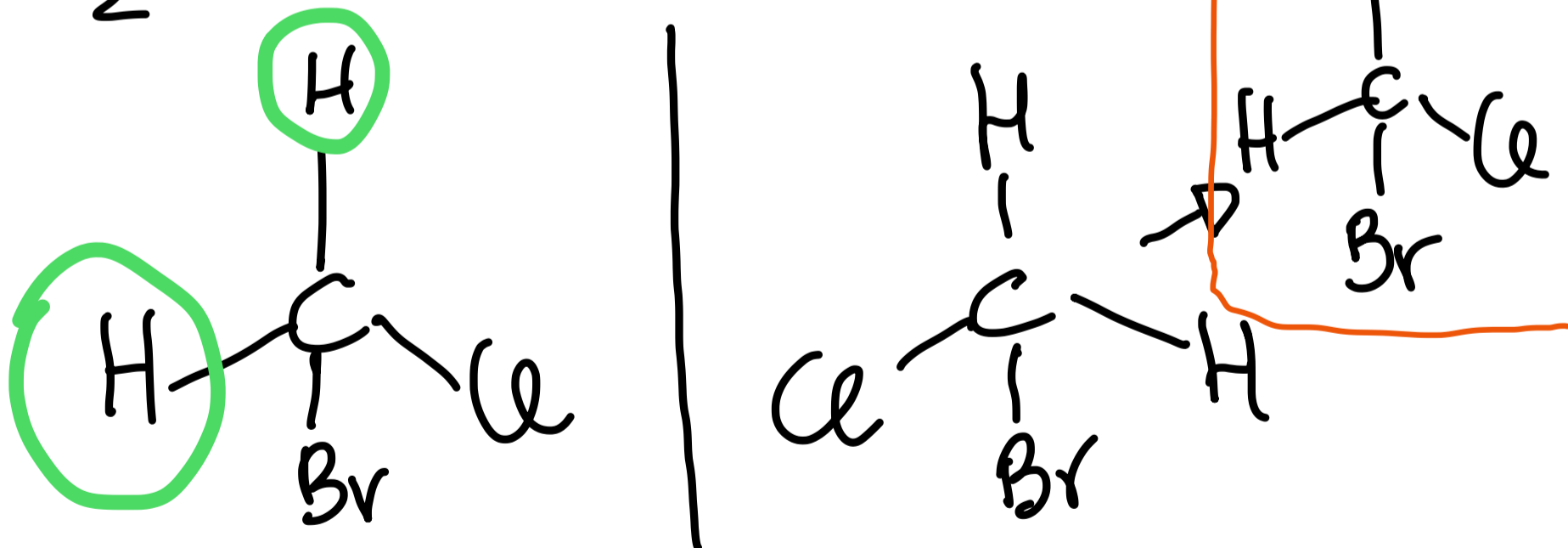
CHIRALITÀ = molecola non sovrapponibile alla sua immagine speculare

ACHIRALE = molecola è sovrapponibile alla sua immagine speculare.



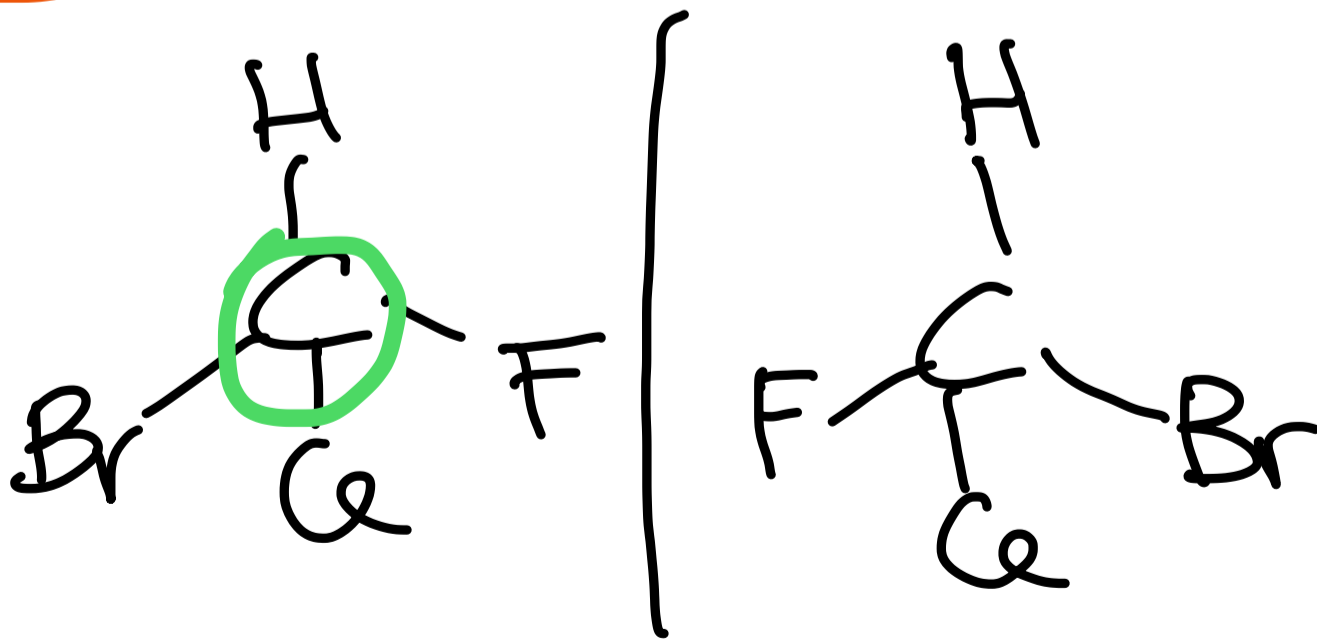
↳ ACHIRALE

$\text{CH}_2\text{BrCl}$

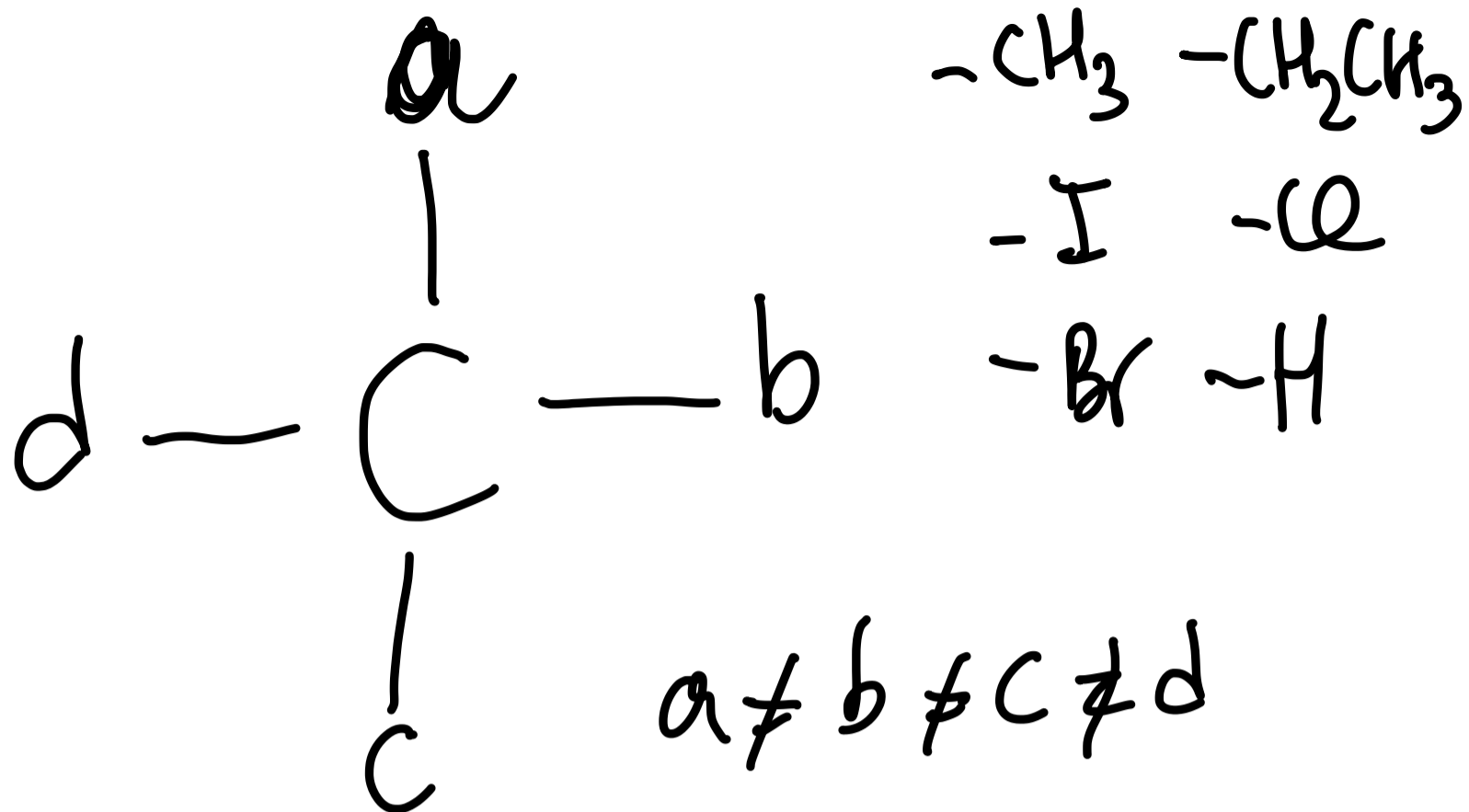


ACHIRALE

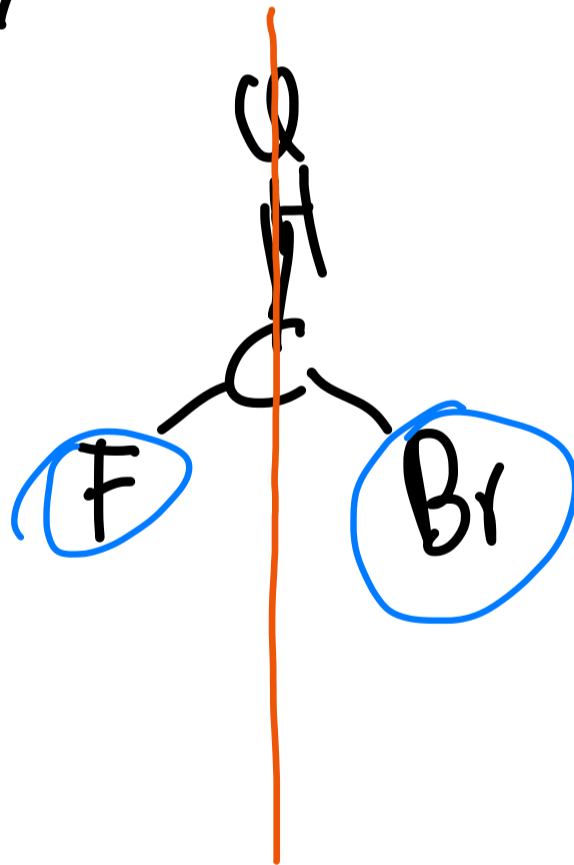
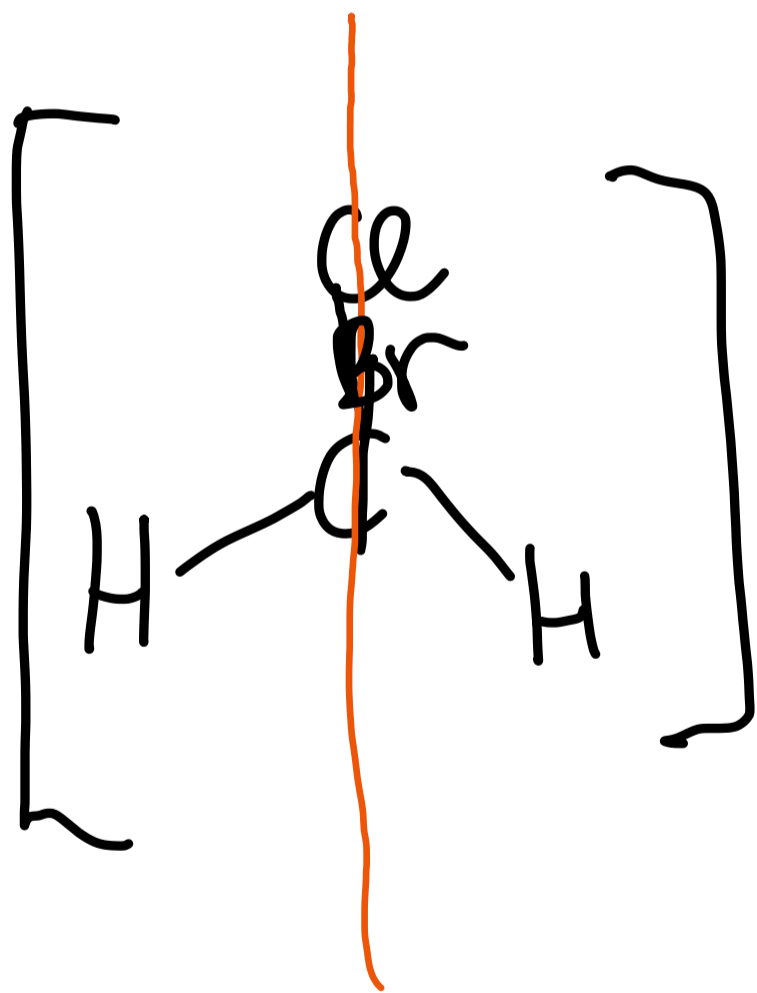
CHBrCF



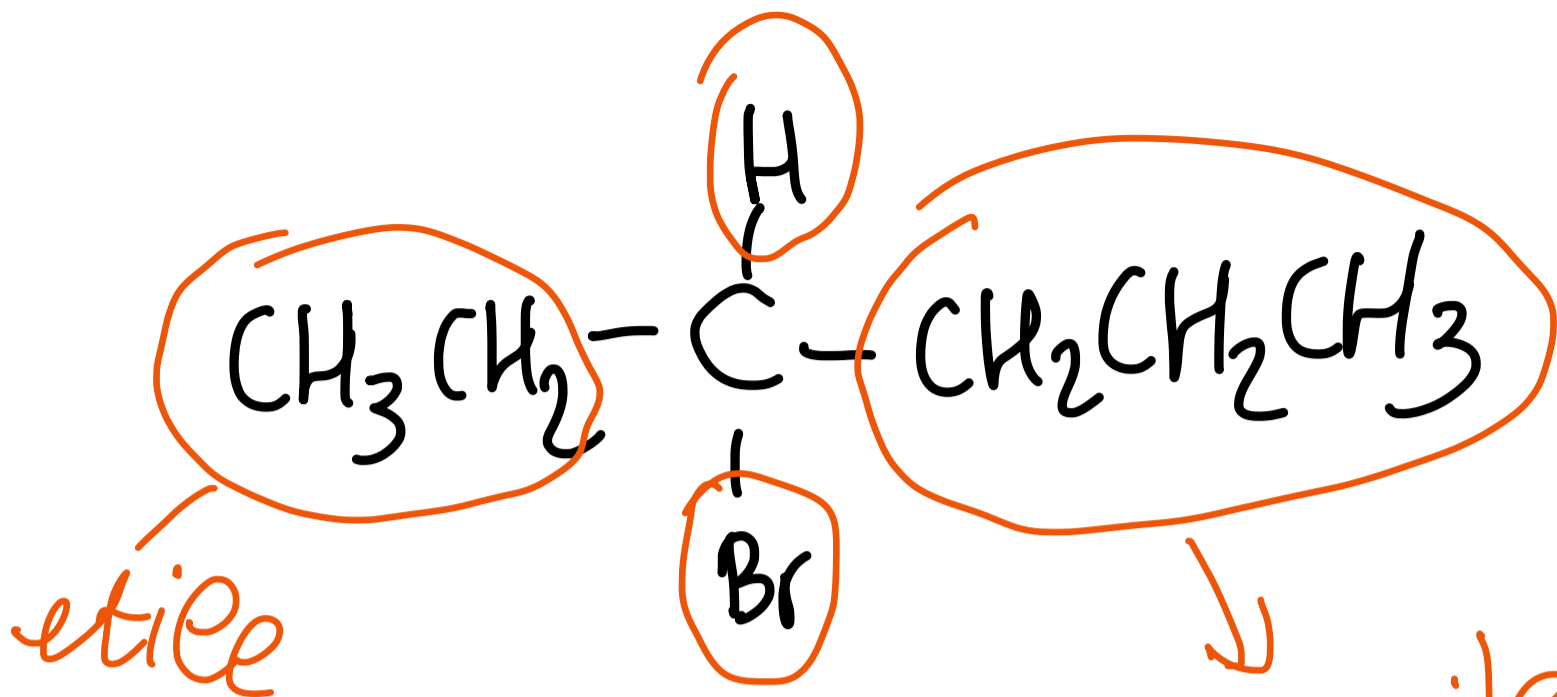
CHIRALE  
ENANTIOMERI



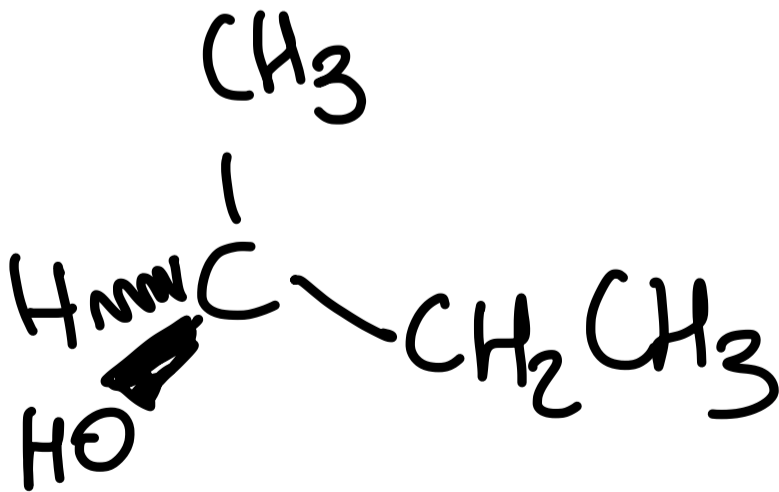
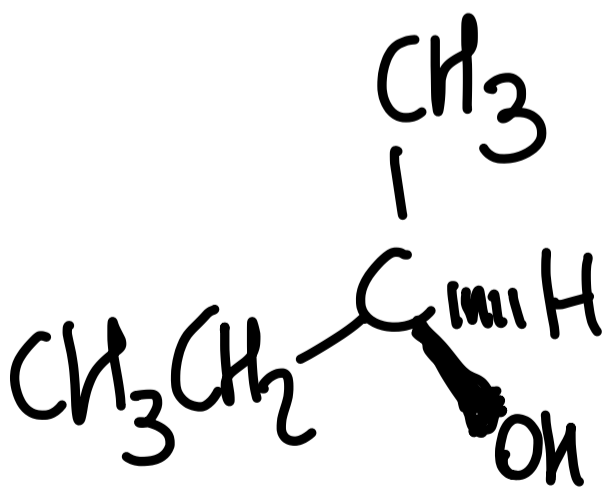
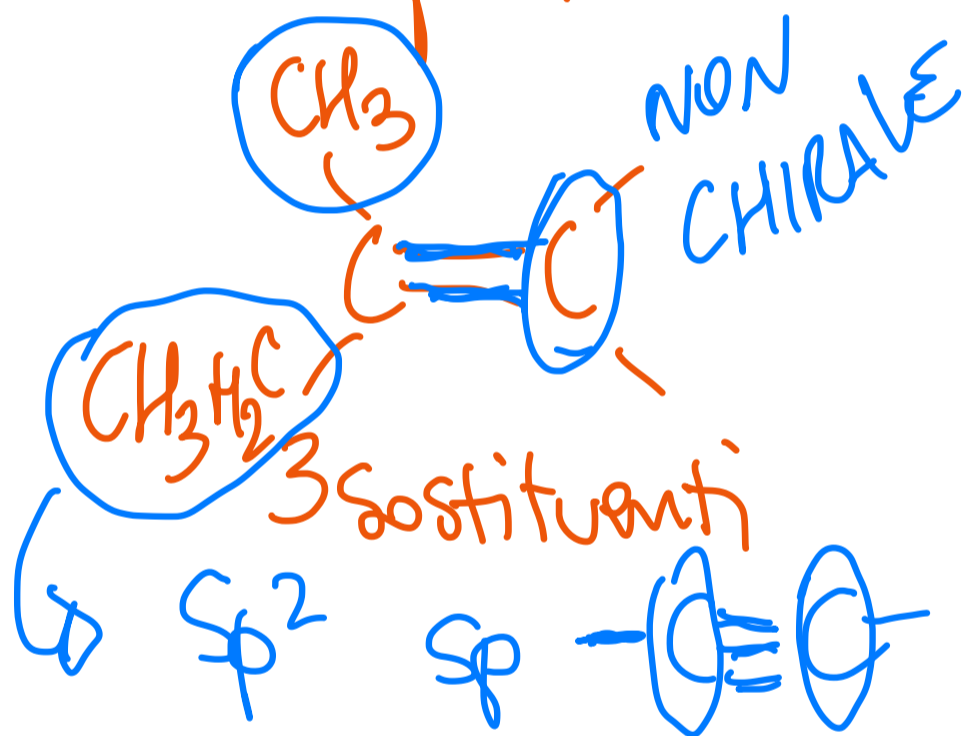
C = centro stereogenico / carbonio chirale



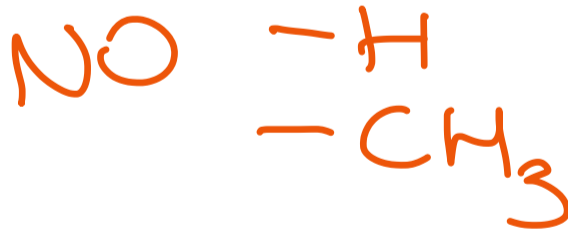
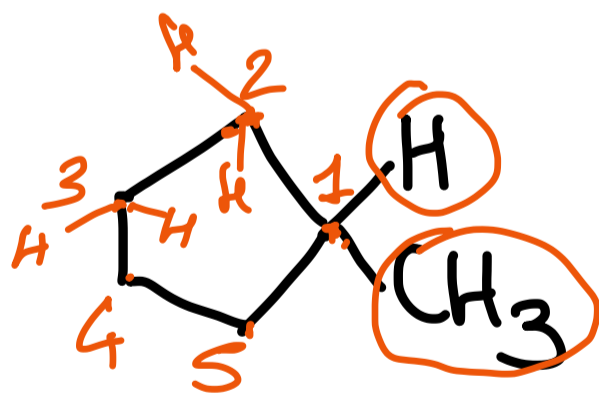
NO



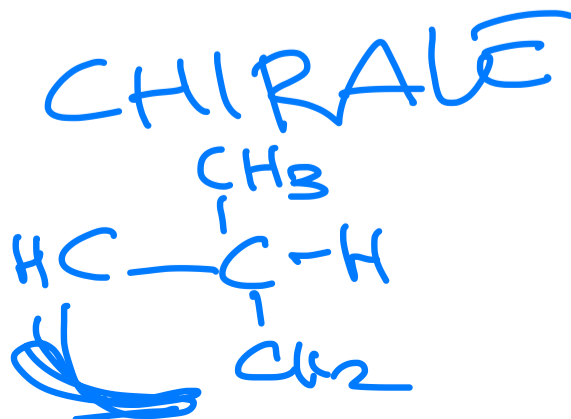
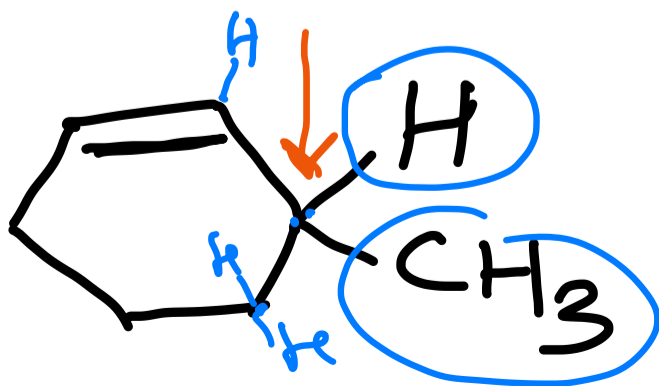
CHIRALE



COPPIA ENANTIOMERI



methylcyclopentano





(R)-3-methyl-cyclohexane

3-methyl-cyclohexane

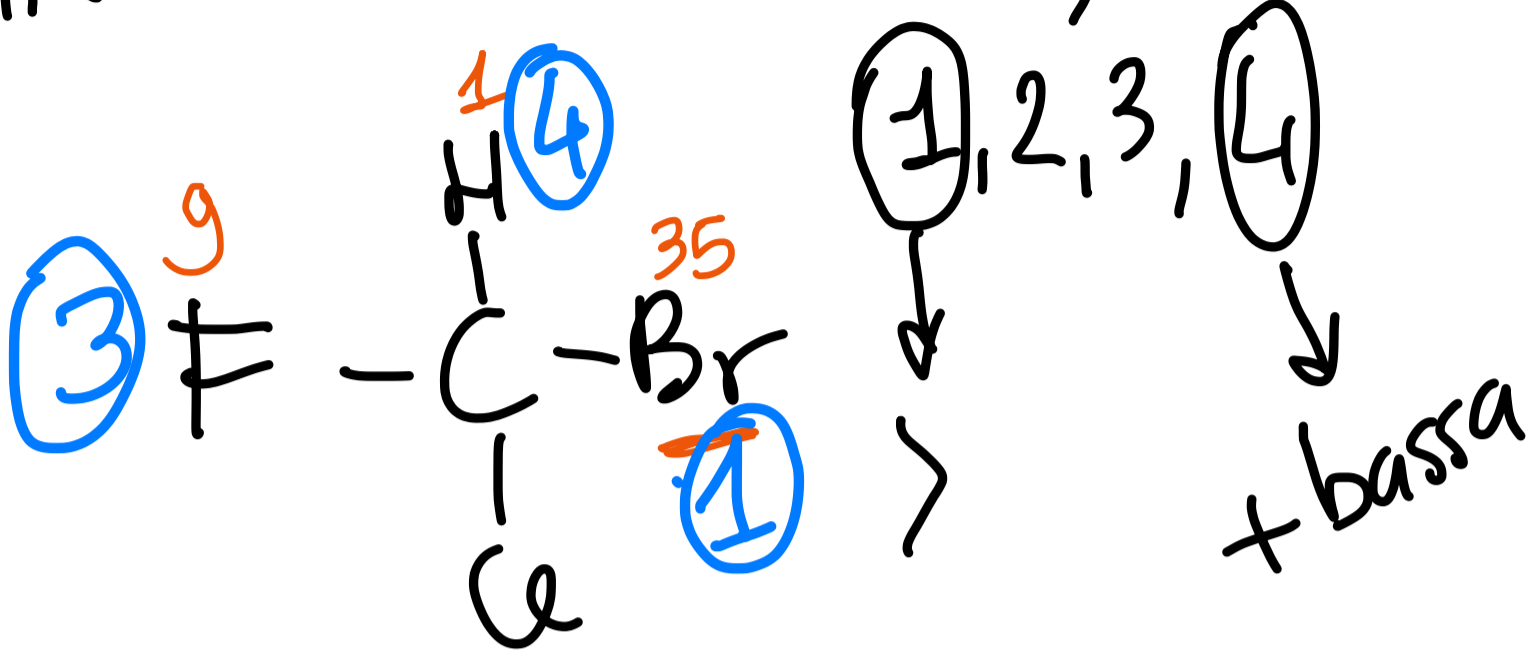
(S)-3-methyl-cyclohexane

ENANTIOMER

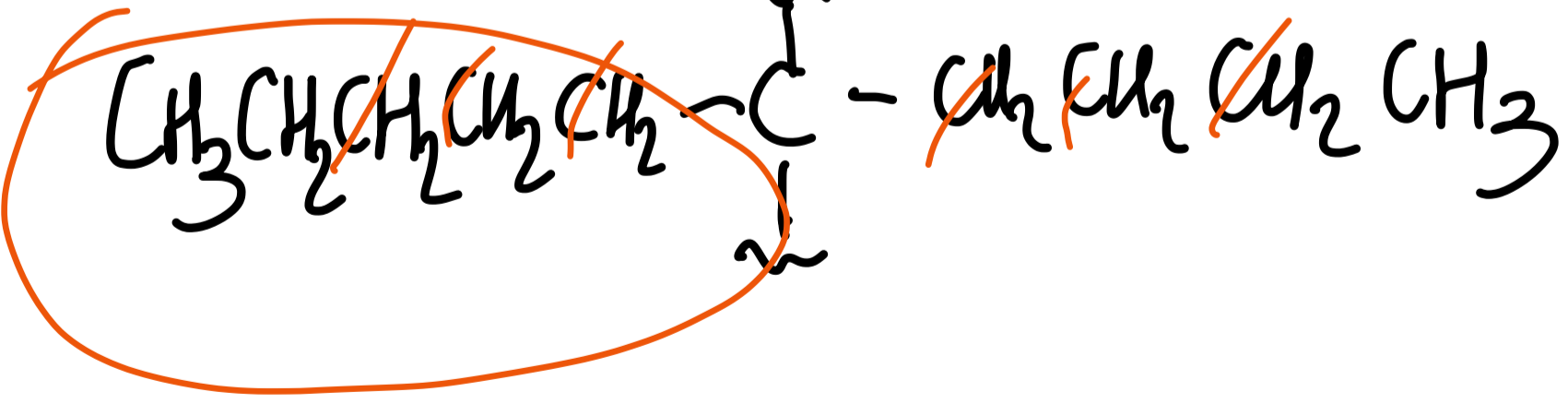
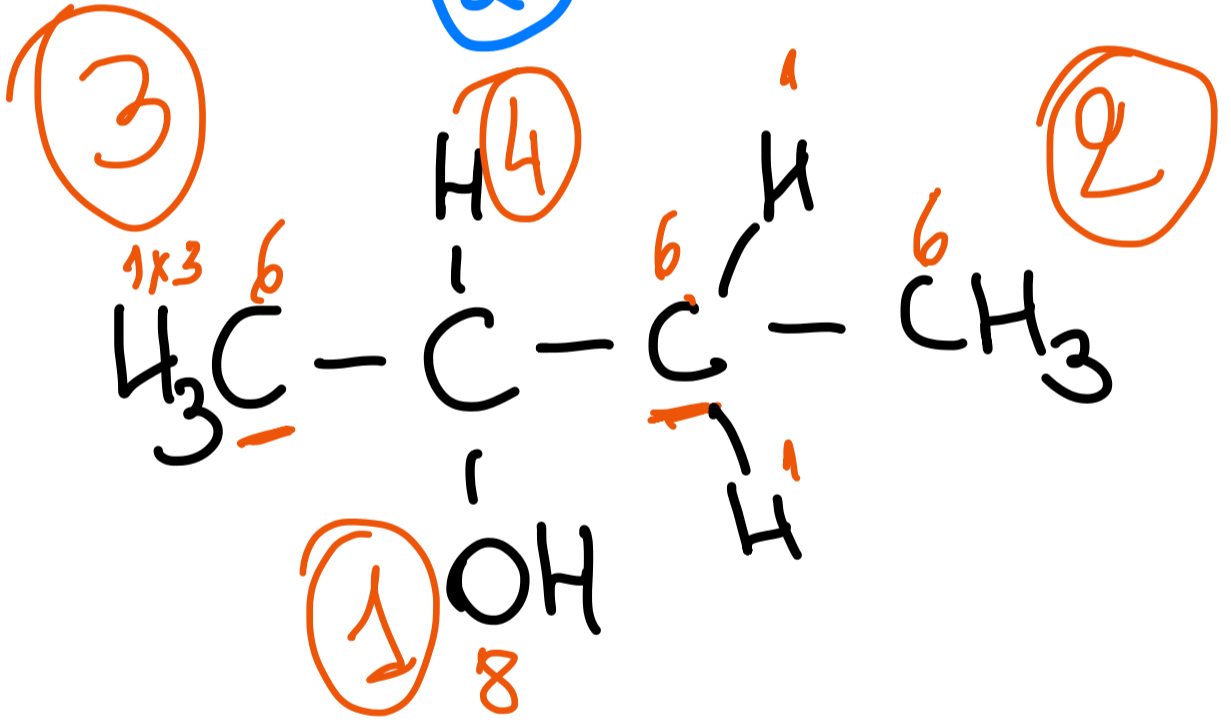
CONFIGURAZIONE → R, S

# CAHN-INGOLD-PRELOG

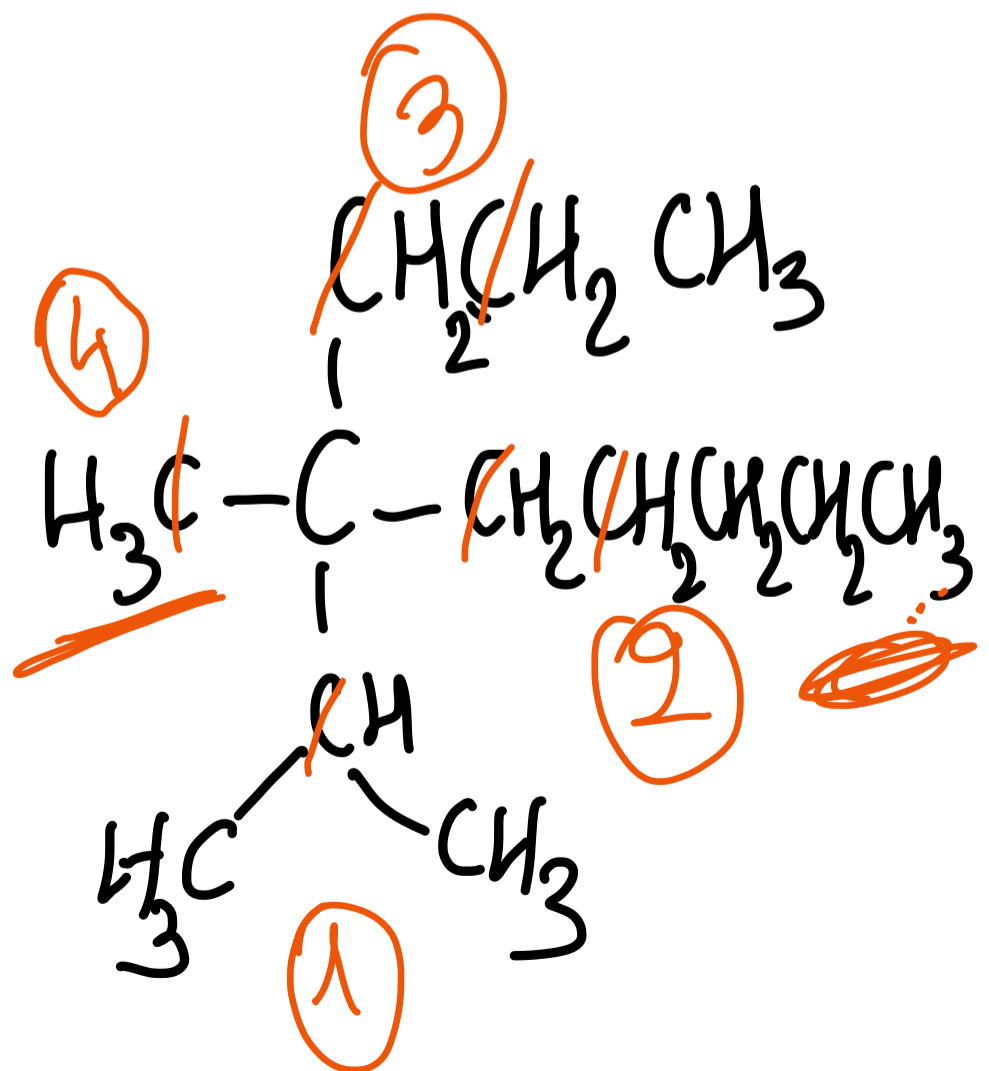
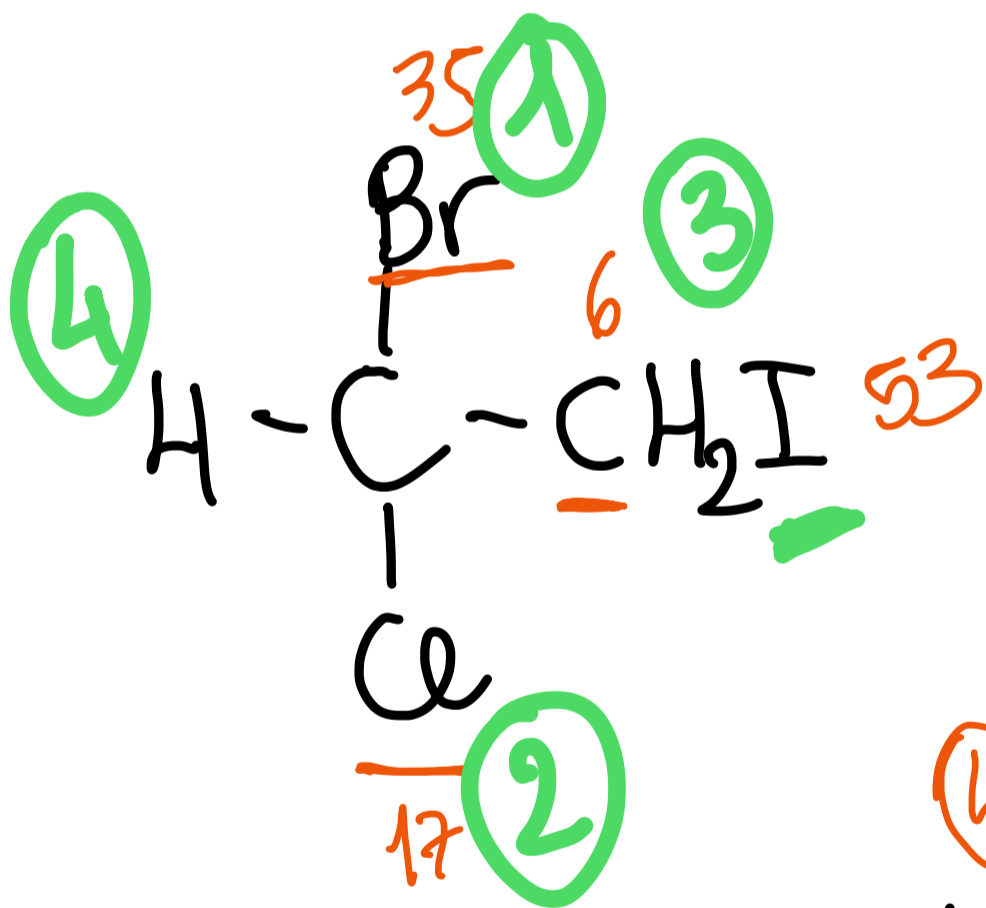
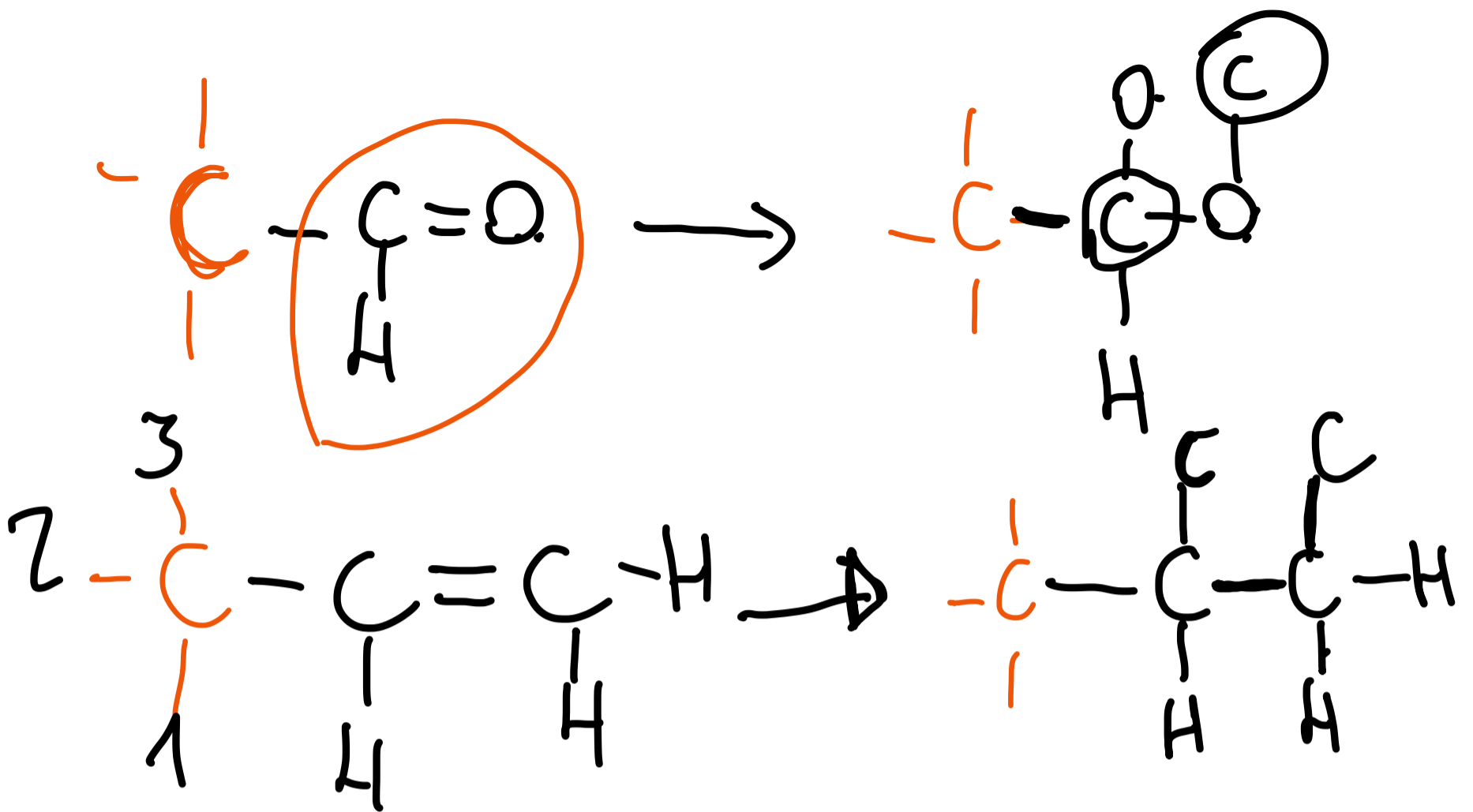
1)

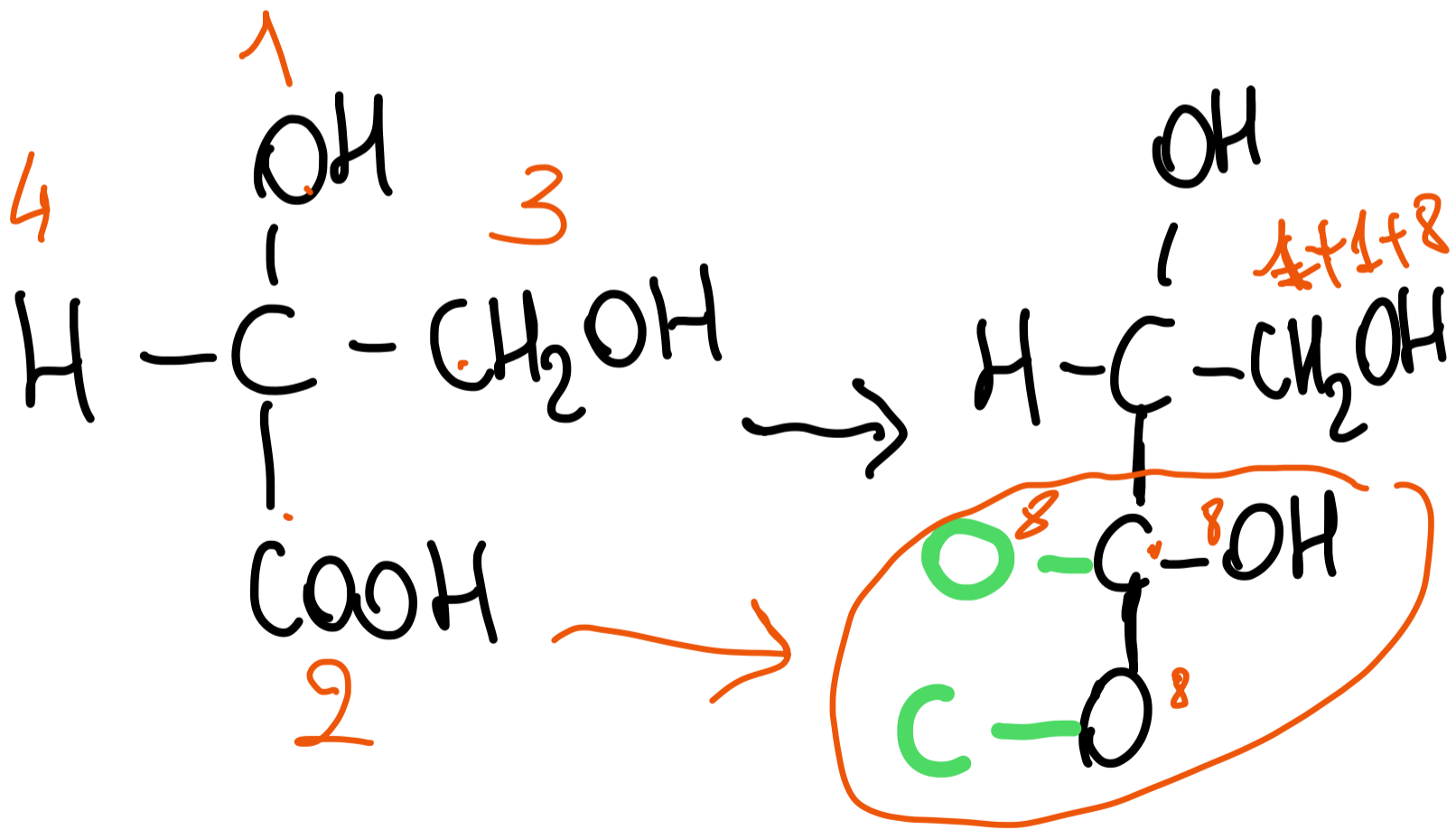


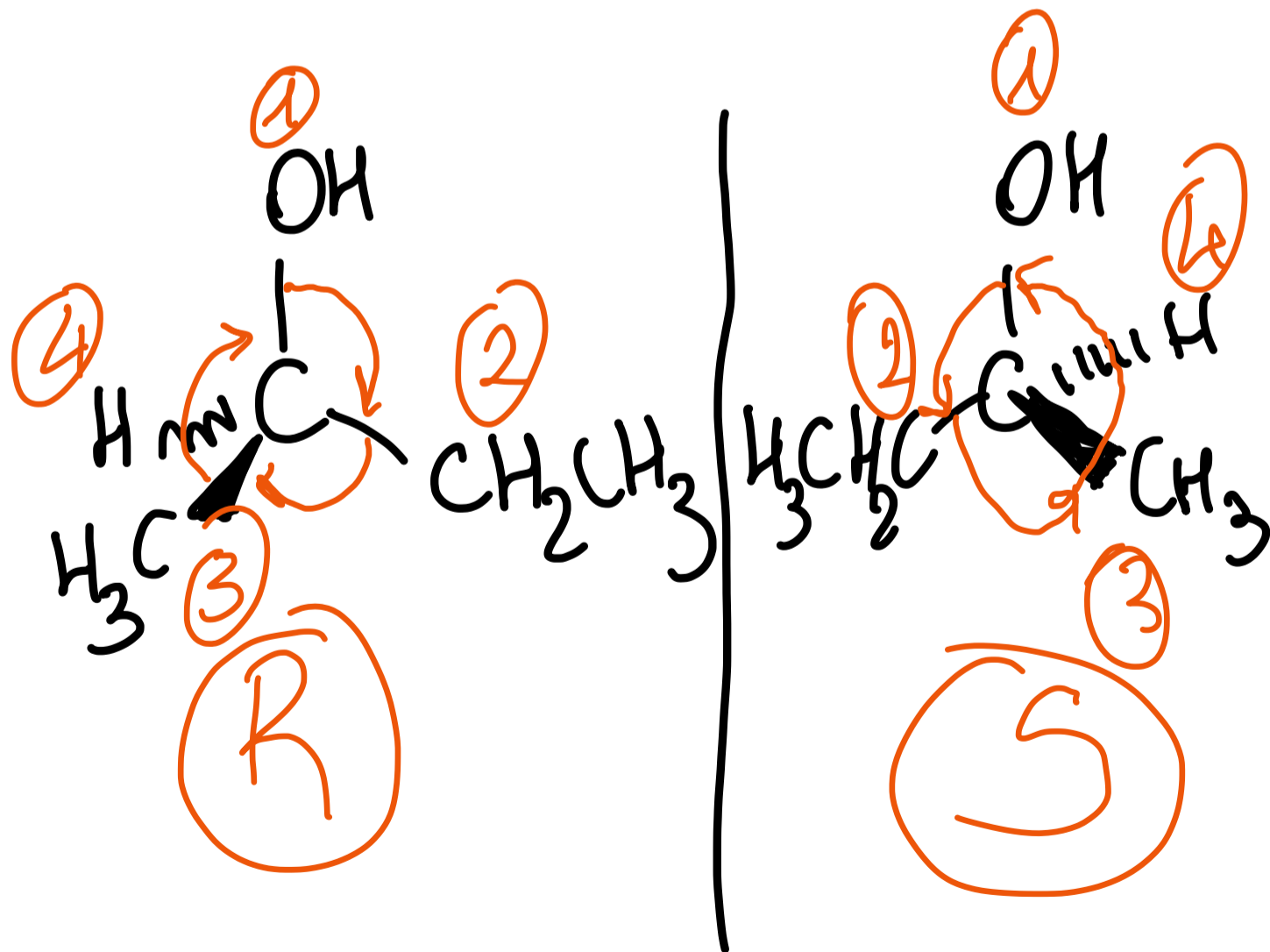
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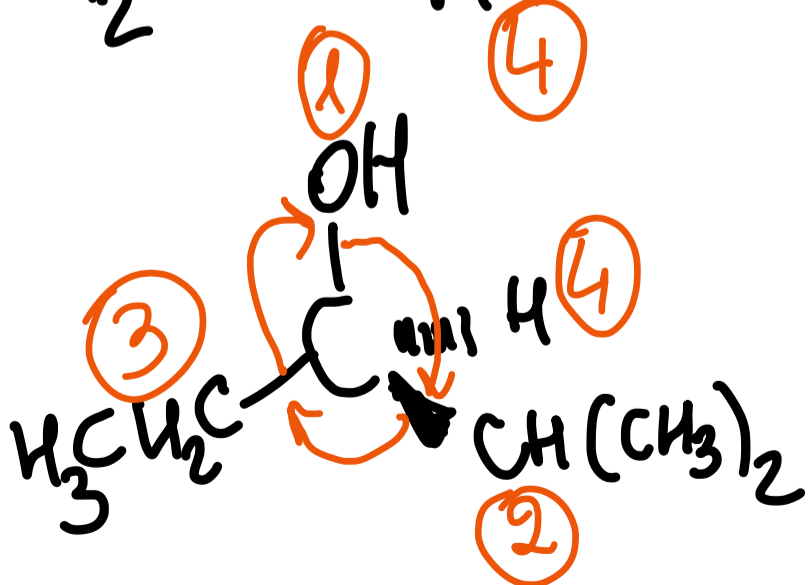
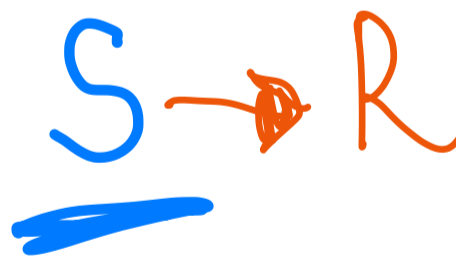
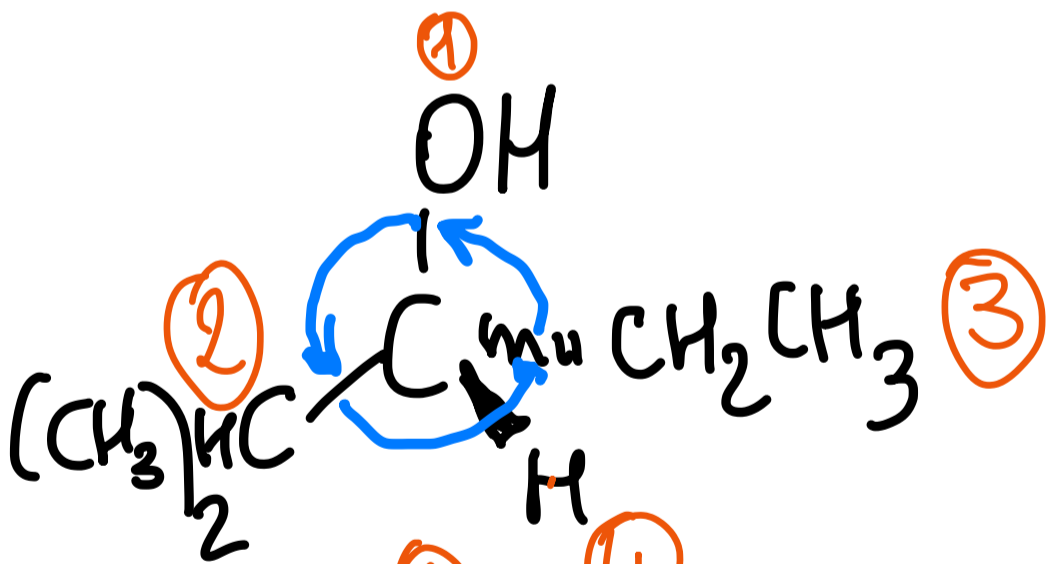
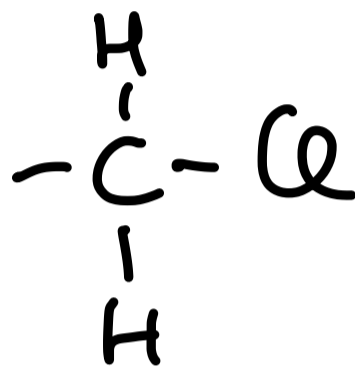
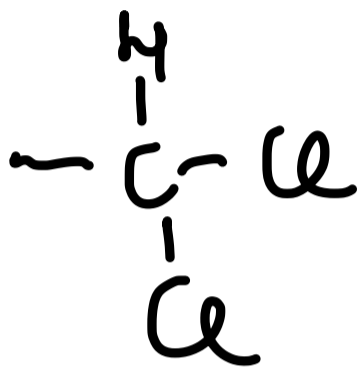
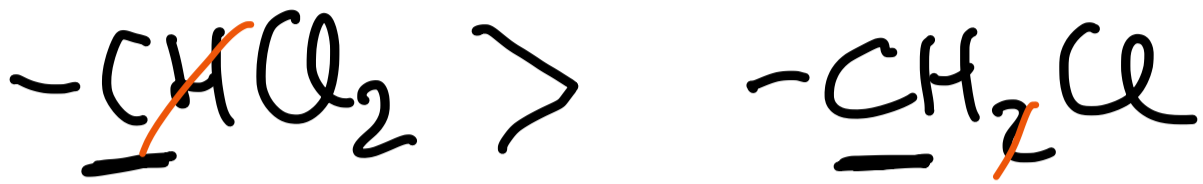


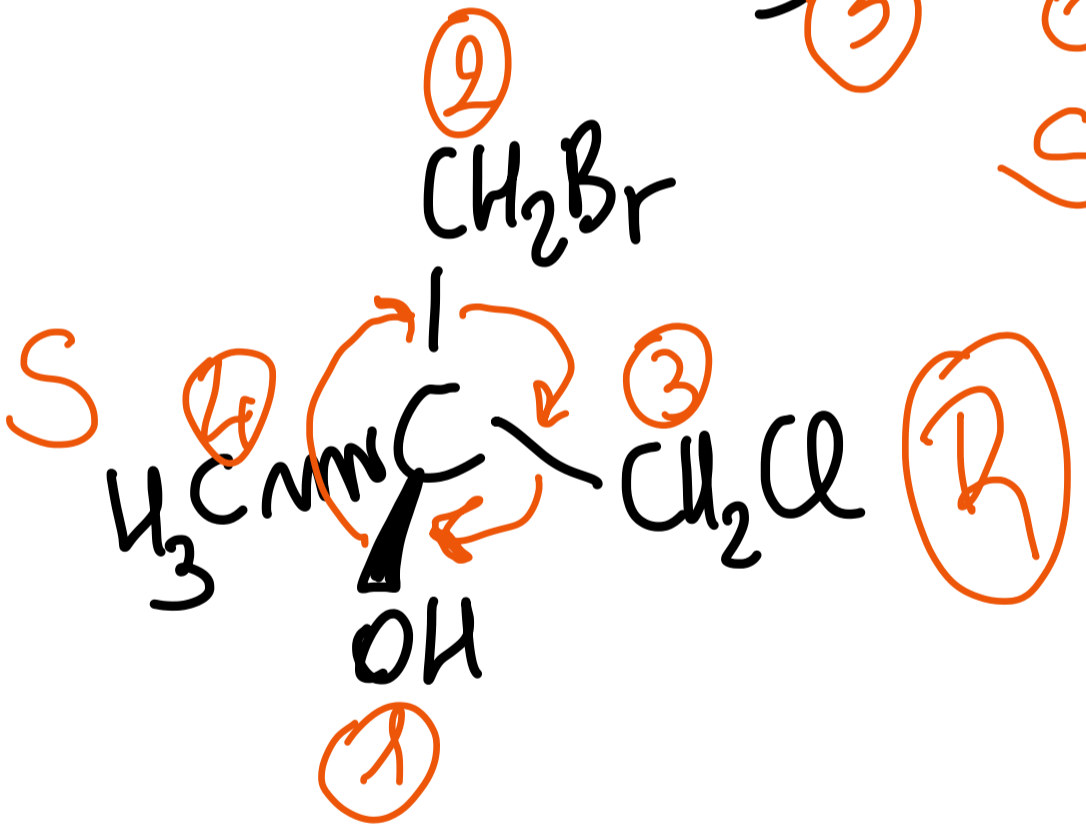
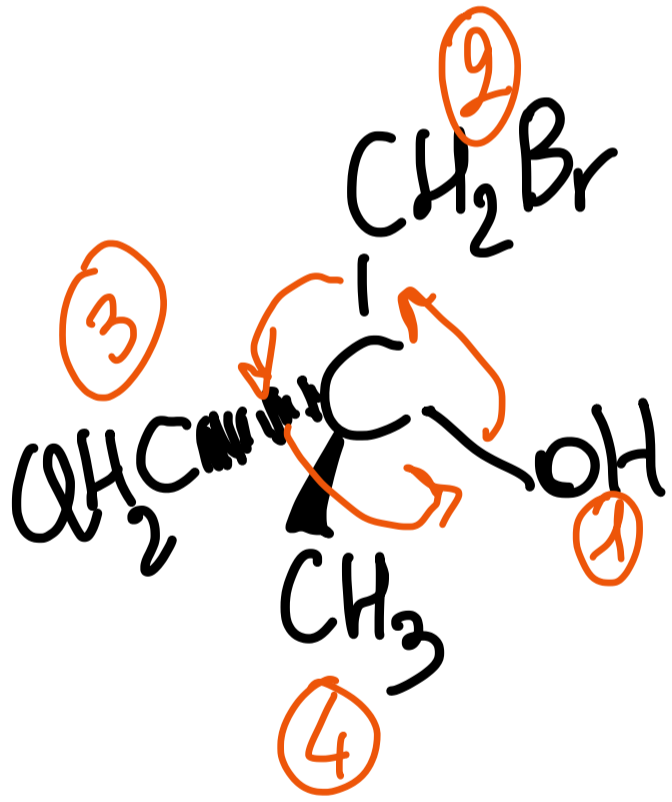
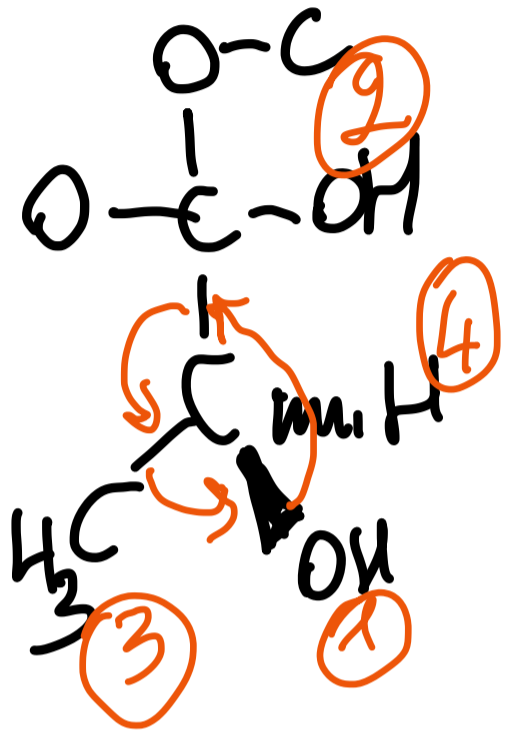
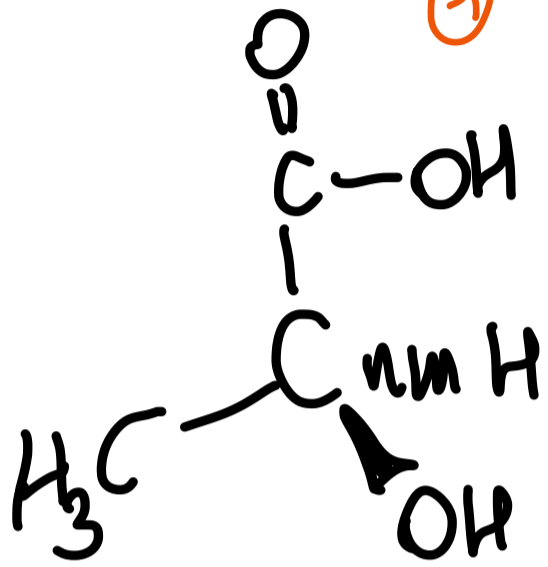
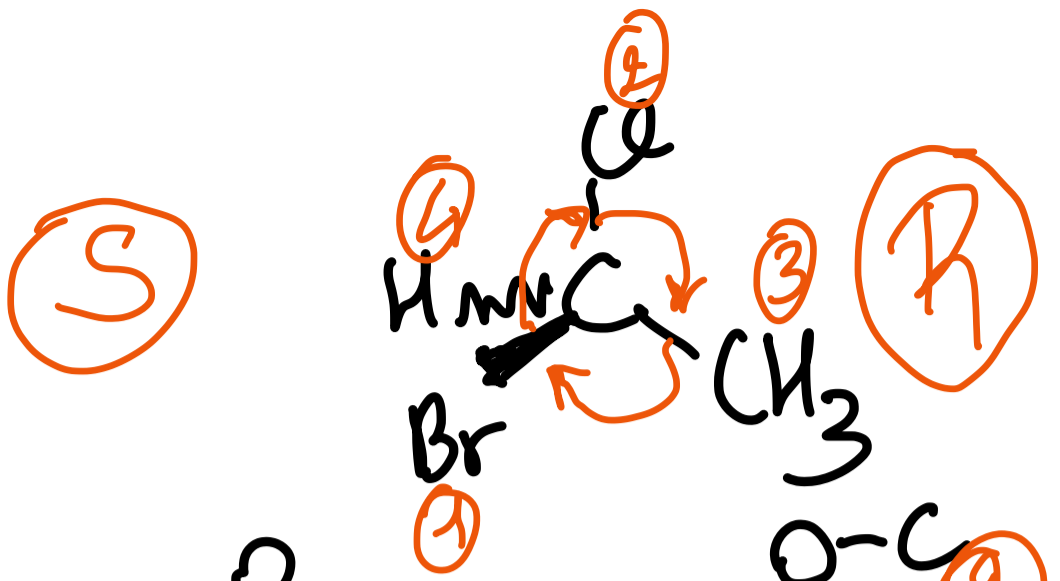
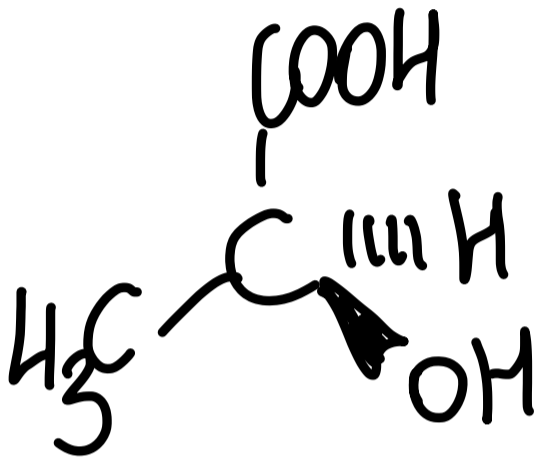
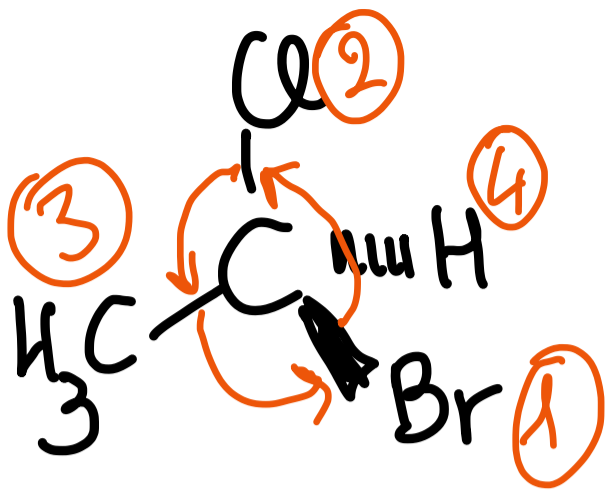




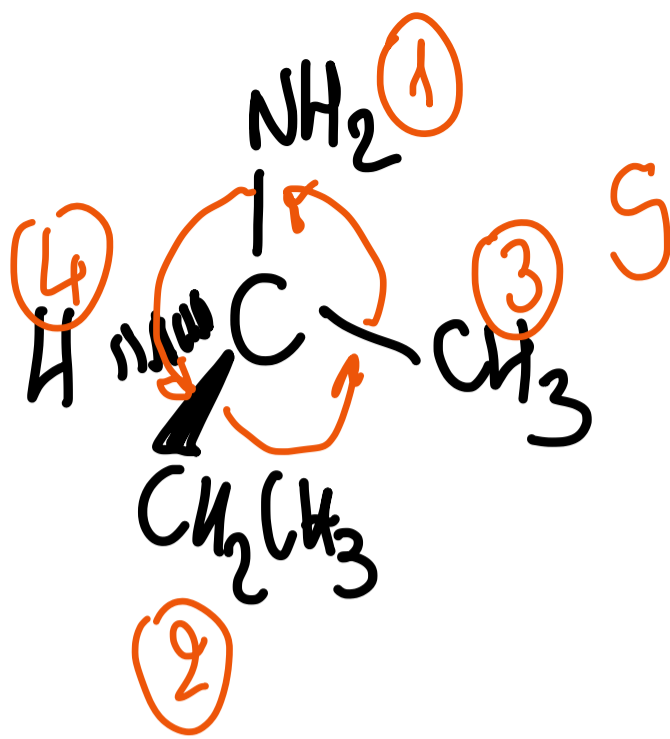
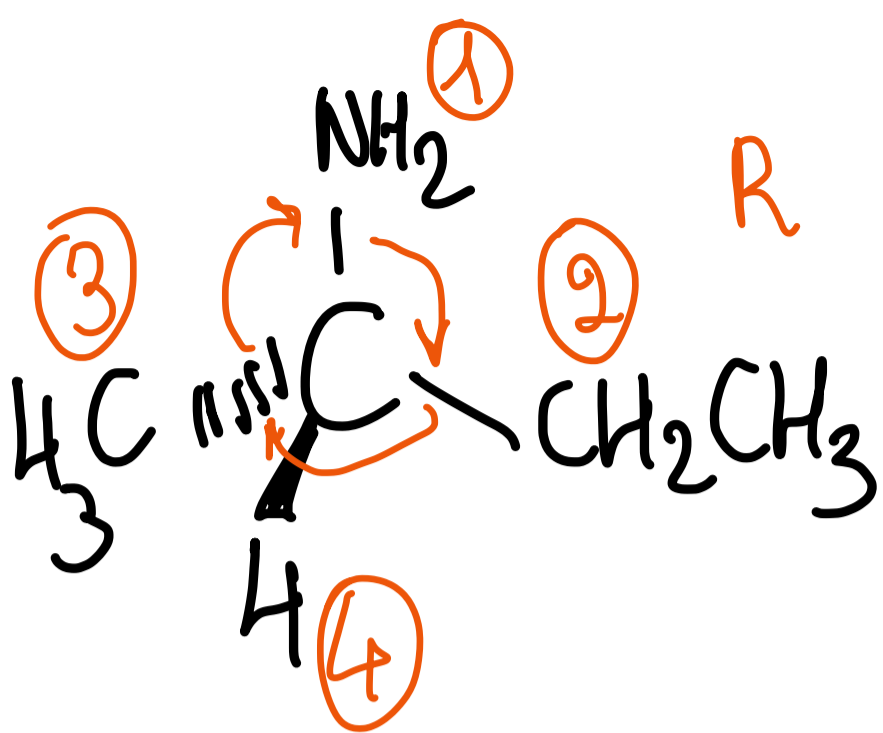








INVERSIONE DI CONFIGURAZIONE

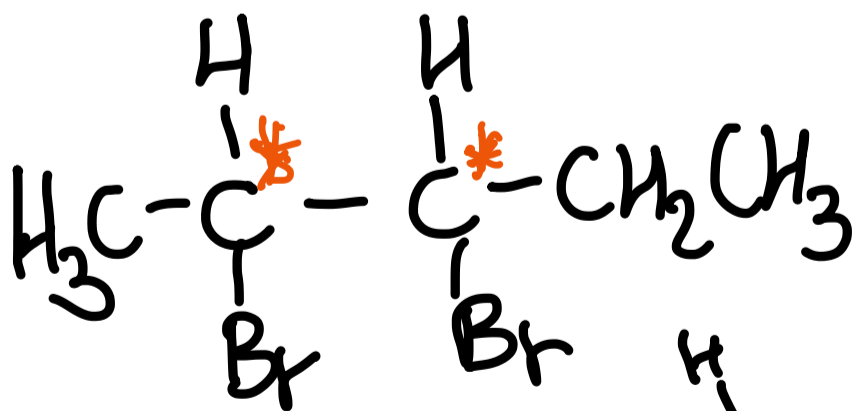


INVERSIONE

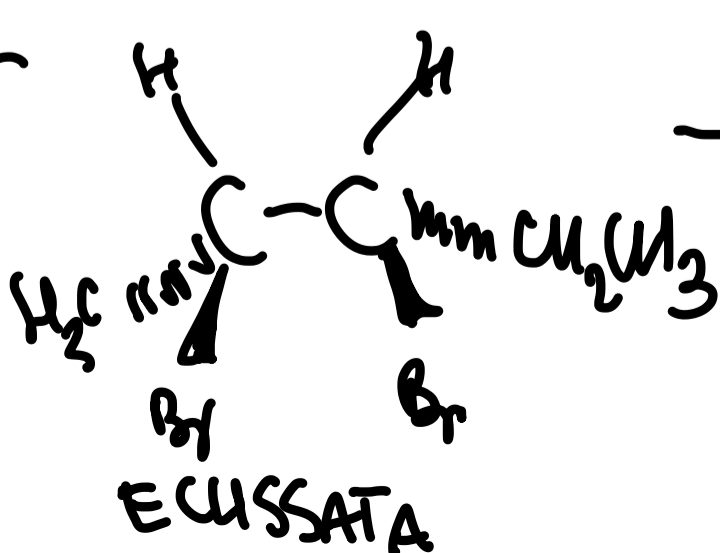
$m$  centri chirali  $\rightarrow 2^m$  N° MAX STEREOISOMERI

$m=1$   $2^1 = 2$  STEREOISOMERI  
 $\downarrow$   
 ENANTIOMERI

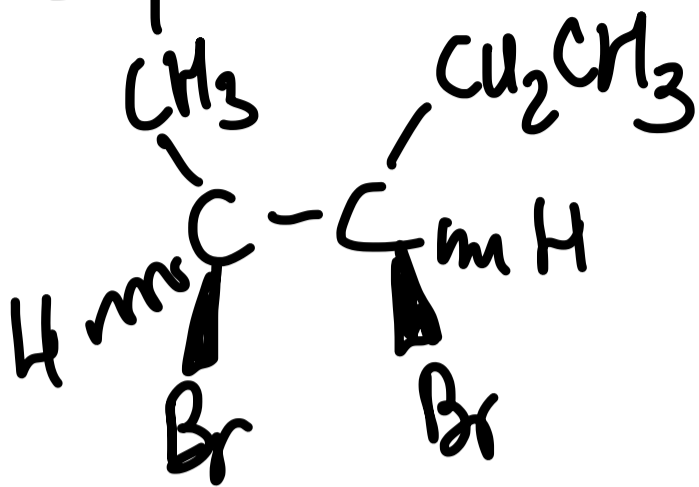
$m=2$   $2^2 = 4$  STEREOISOMERI



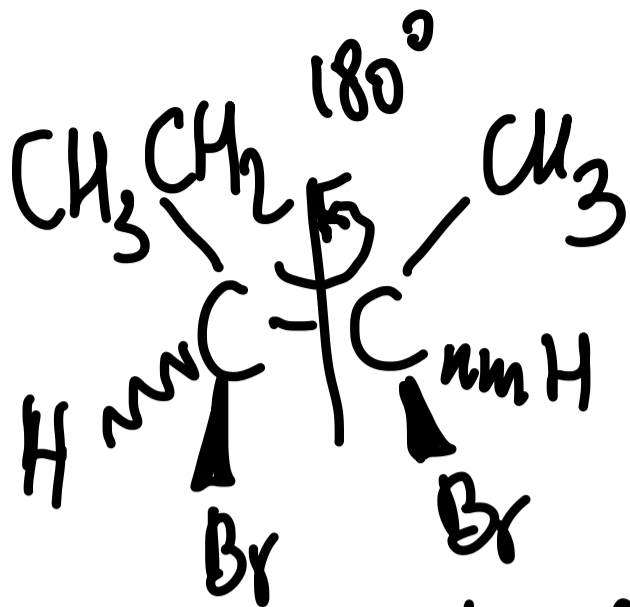
2,3-DIBROMO PENTANO



$2^2 = 4$  STEREOISOMER!

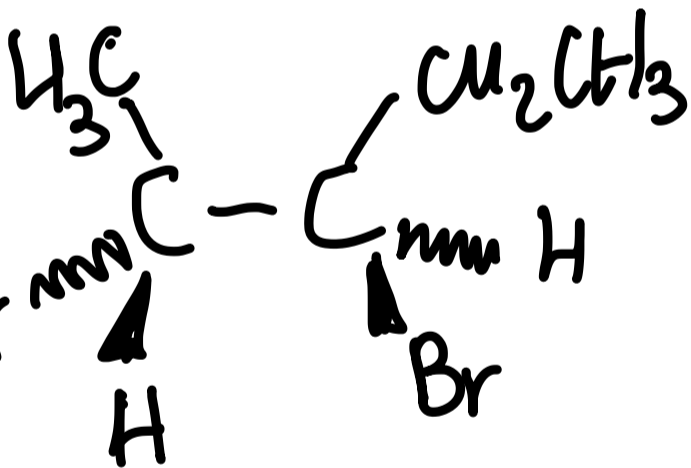
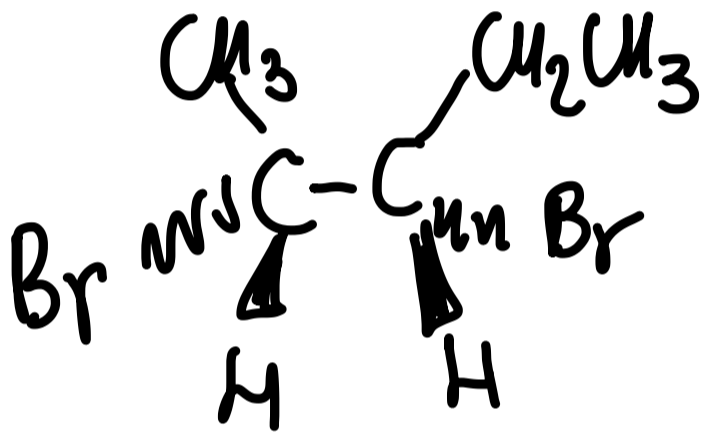


A

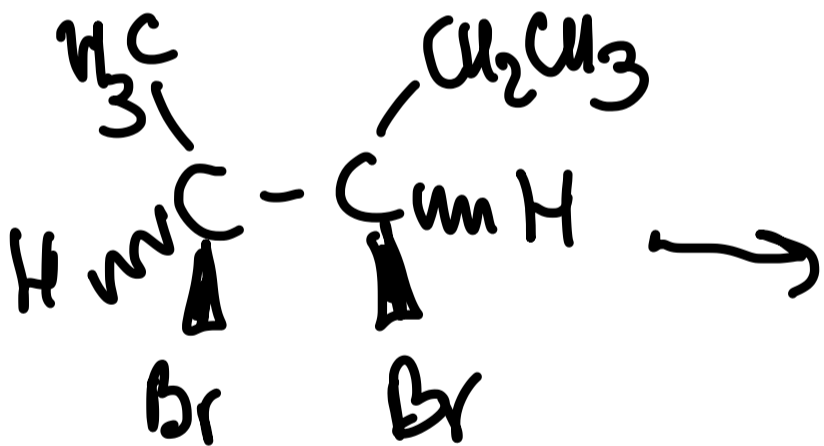


B  $\downarrow 180^\circ$

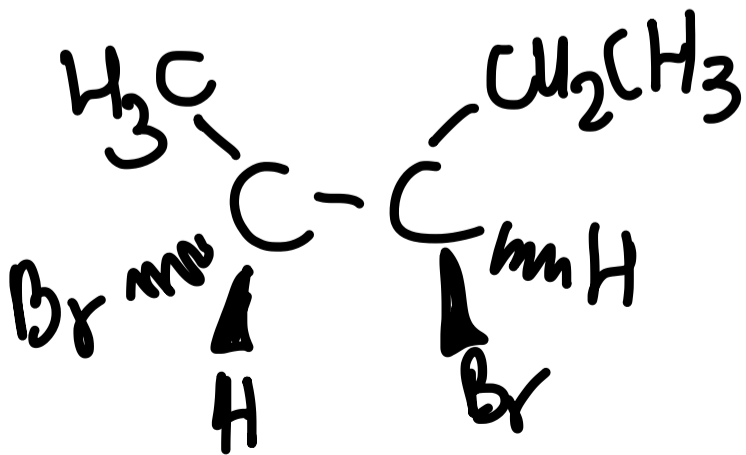
A, B ENANTIOMER!



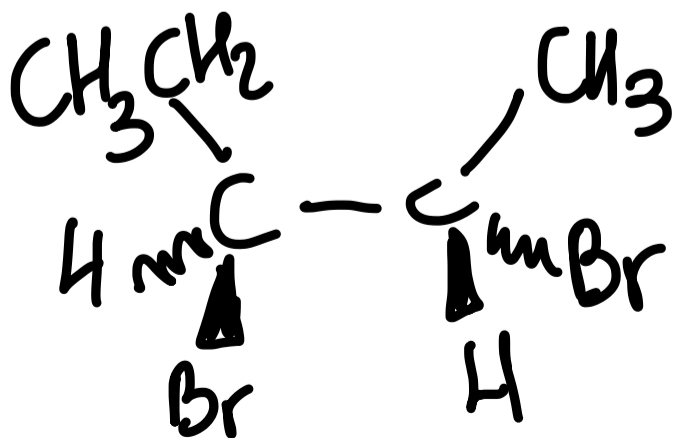
C



A



C



D

ENANTIOMER!

A-C

DIASTEREOMERI

A-D

DIASTEREOMERI

B-C

"

B-D

"

$$2^2 = 4$$

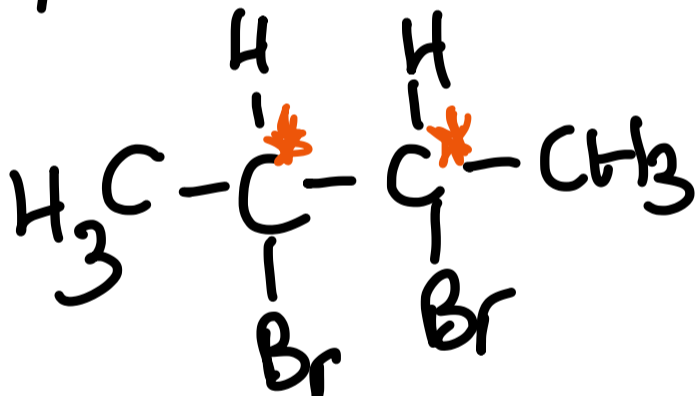
A-B

ENANTIOMERI

C-D

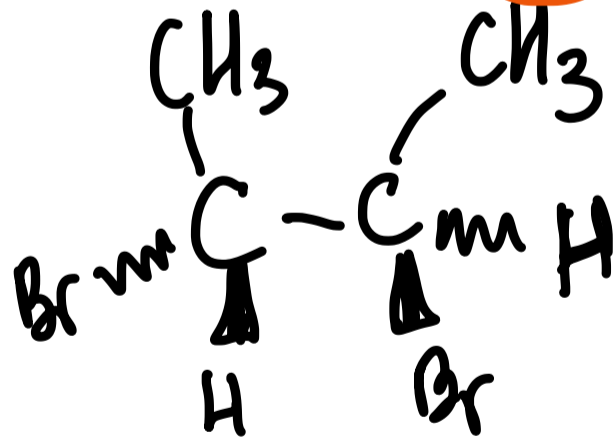
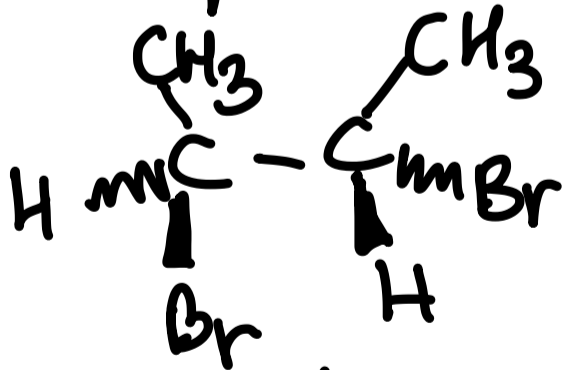
"

### 2,3-DIBROMOBUTANO

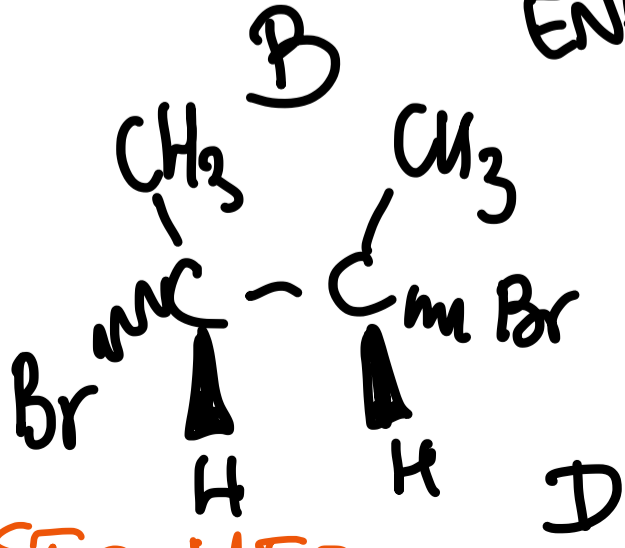
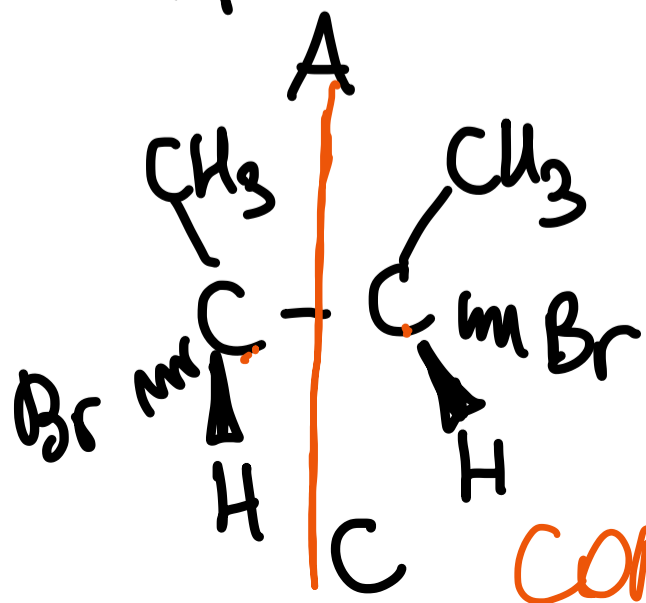


2<sup>2</sup> = 4 stereoisomeri

3



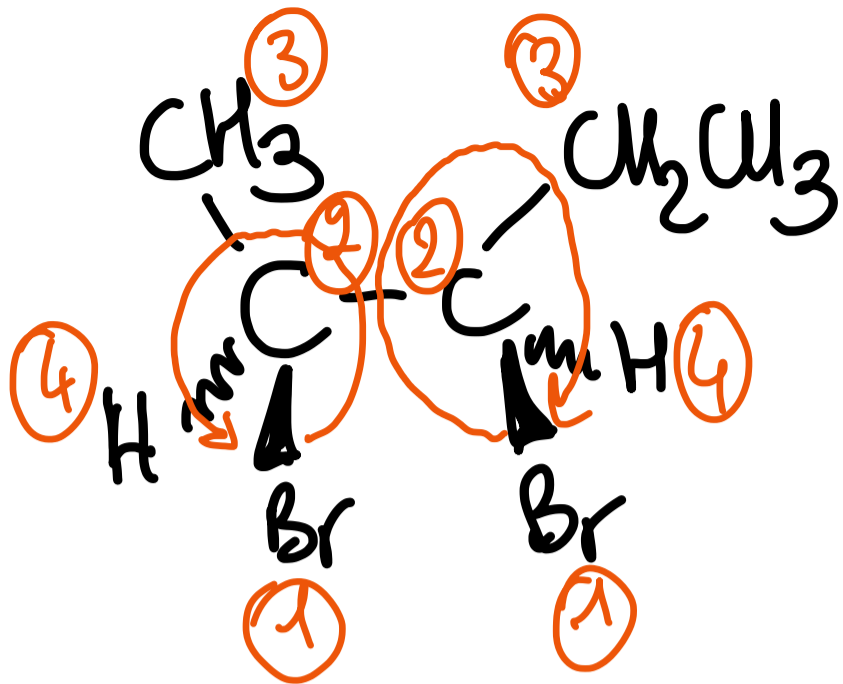
ENANTIOMERI



COMPOSTO MESO

ACHIRALE





R S

C-C

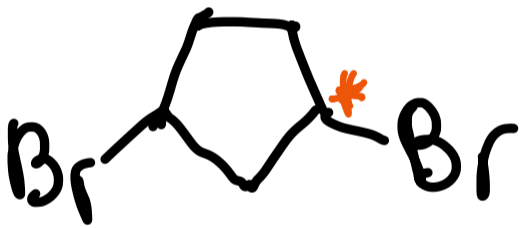
R, R → S, S

R, S → S, R

C<sub>2</sub> → S

C<sub>3</sub> → R

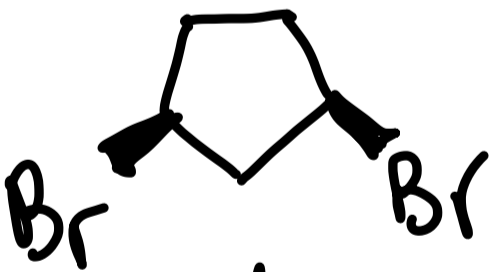
(2S, 3R) - 2,3-DIBROMOPENTANO



1,3-DIBROMO CICLOPENTANO

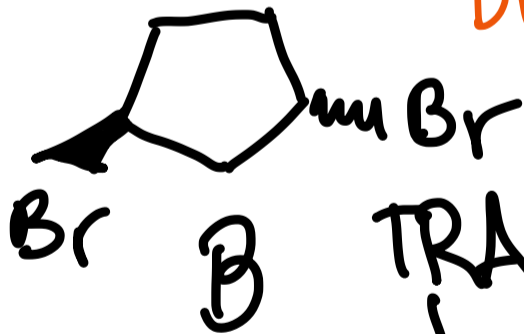
$$2^2 = 4$$

DIASTEREISOMERI



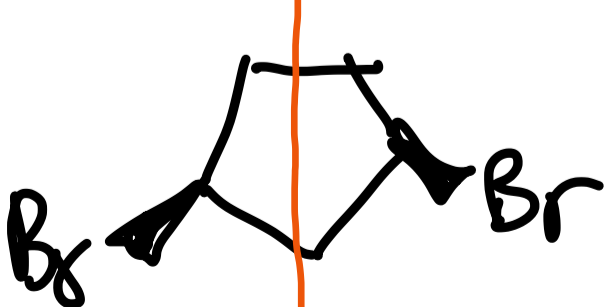
A

CIS → dalla stessa parte

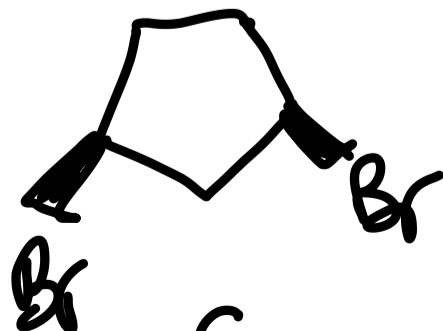


TRANS =

da parti opposte



A

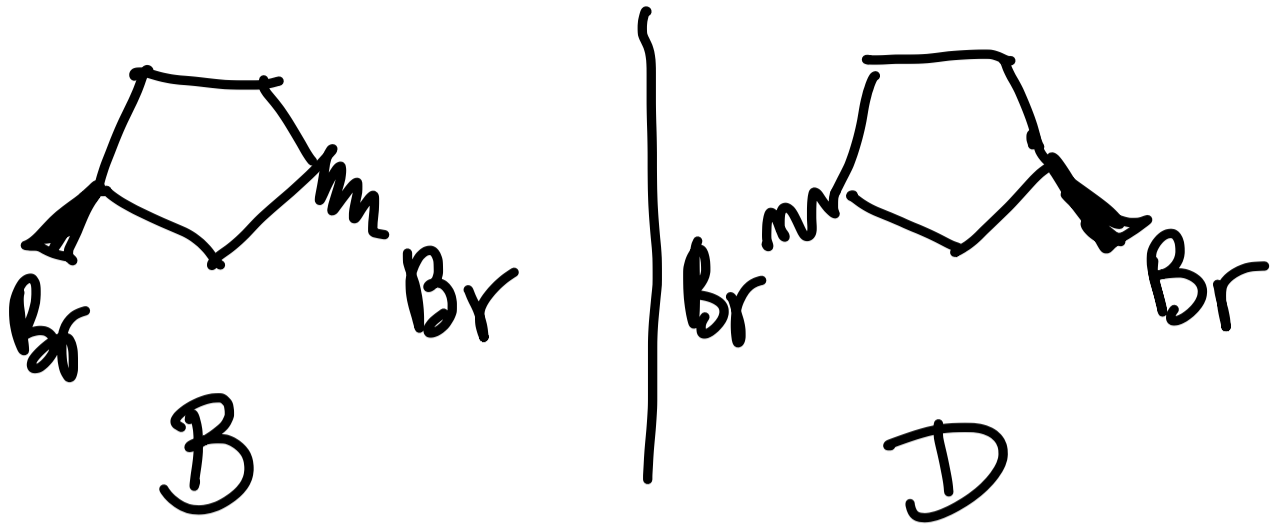


C

ACHIRALE = MESO

ISOMERO

CIS = MESO



TRANS → COPPIA ENANTIOMERI

$$2^2 = \textcircled{4}$$

$$\textcircled{3}$$

COMPOSTO MESSO (A)  
2 ENANTIOMERI (B, D)

## ISOMERI

Composti diversi  
con stessa formula molecolare

COSTITUZIONALI  
connessione di  
atomi diversi

STEREISOMERI  
differente orientaz.  
nello spazio

ENANTIOMERI

DIASTERIS.