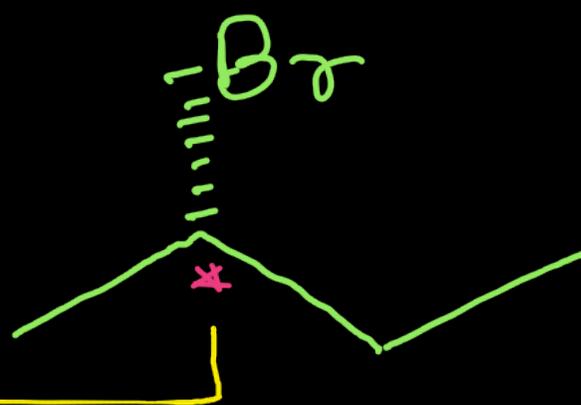


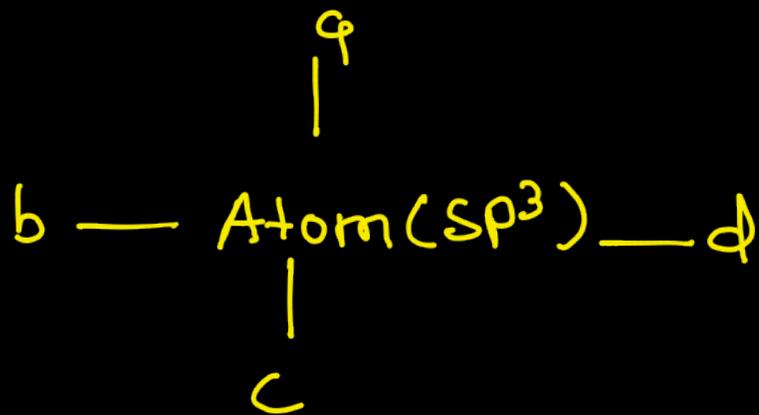
①



Chiral Centre



wedge to dash (Enantiomer)
(Apply when 1 chiral centre)

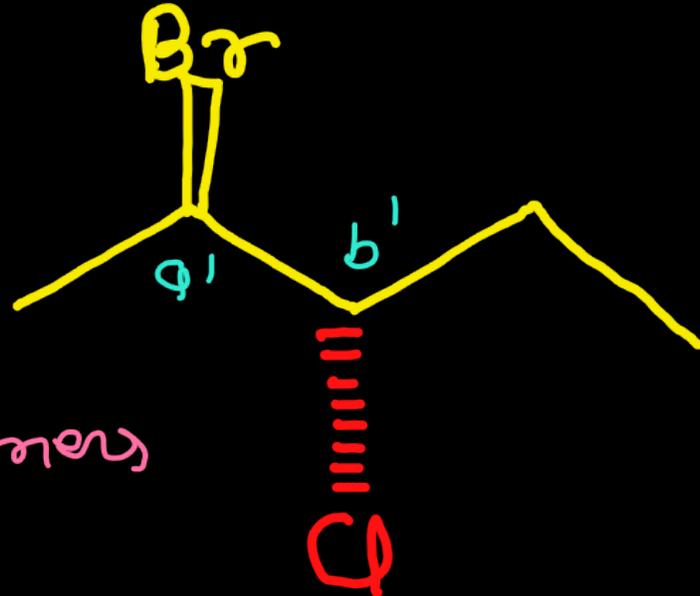
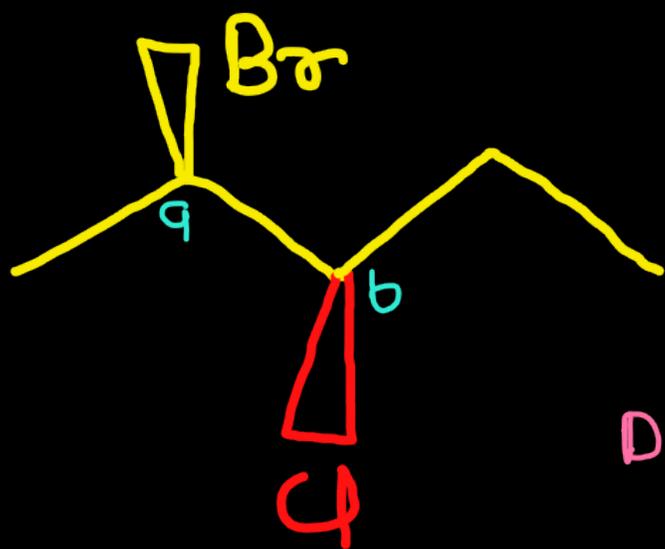


Enantiomer

→ Mirror Image

→ Non superimposable M.I.

2



Diastereomers

$a \rightarrow a'$ (No change)

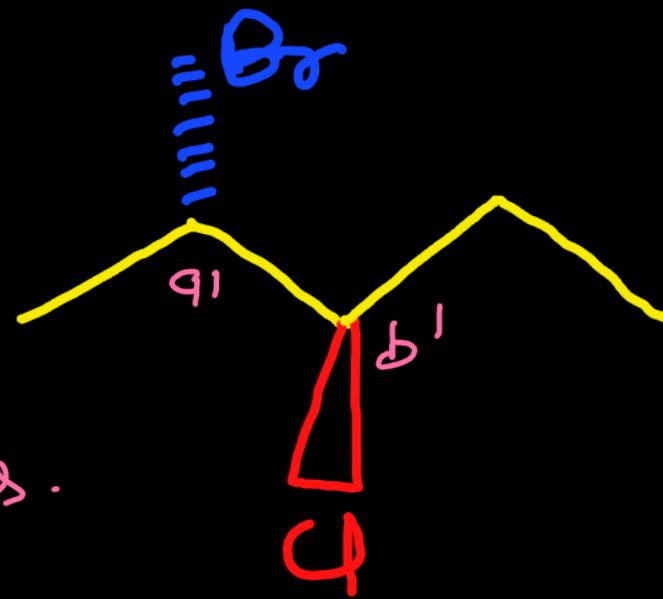
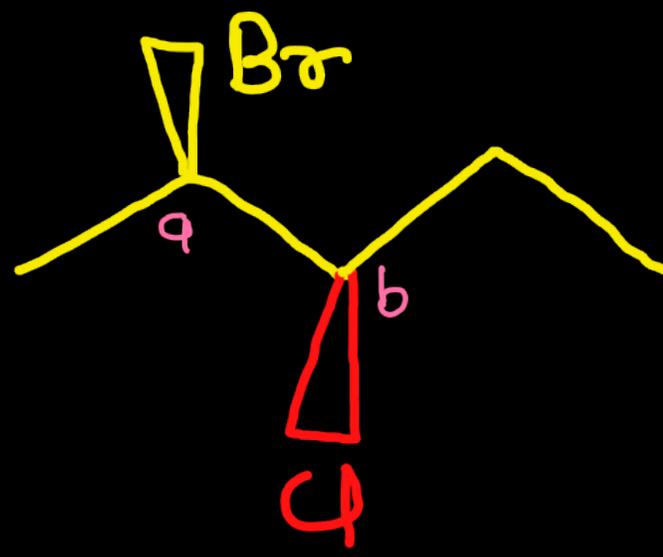
$b \rightarrow b'$ (Wedge to dash)

Diastereomers

Which are not mirror image.

* When two chiral centre and any one of them is change i.e $W \rightarrow D$ or $D \rightarrow W$ Always Diastereomers.

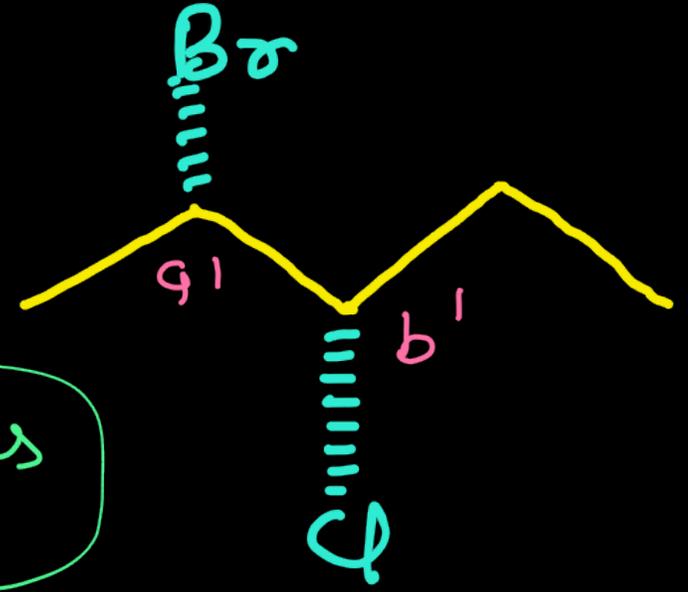
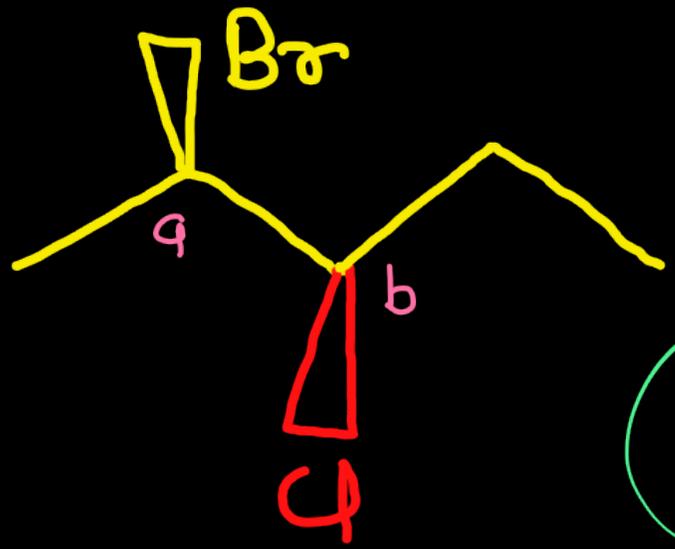
3



Diastereomers.

a → a' (Change wedge to dash)
b → b' (No change)

4



Enantiomers

$a \longrightarrow a'$ (Change)

$b \longrightarrow b'$ (Change)

Enantiomers

M.I , N.S.I

II-Method

#

Two chiral centre

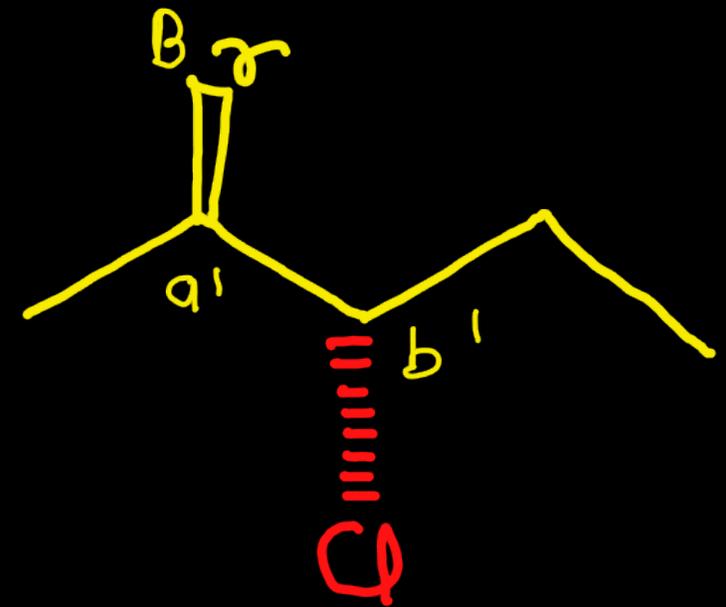
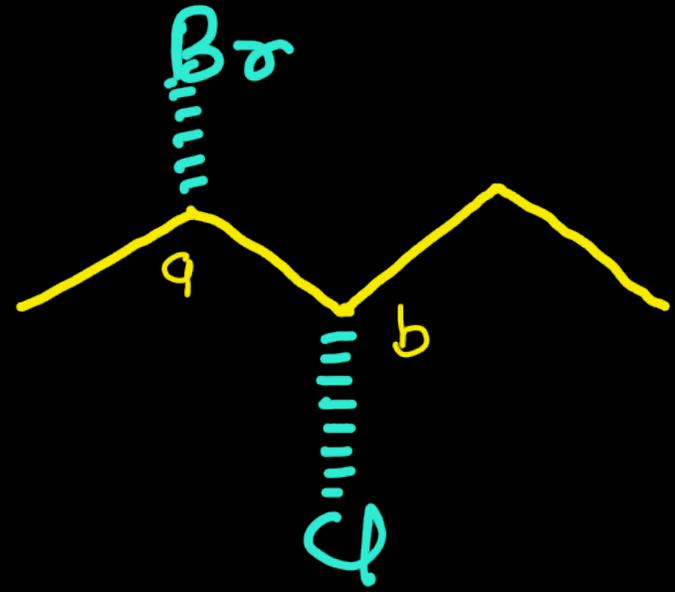
or
 S
 P
 S

or
 S
 P
 S

or
 S
 P
 S

or
 S
 P
 S

5

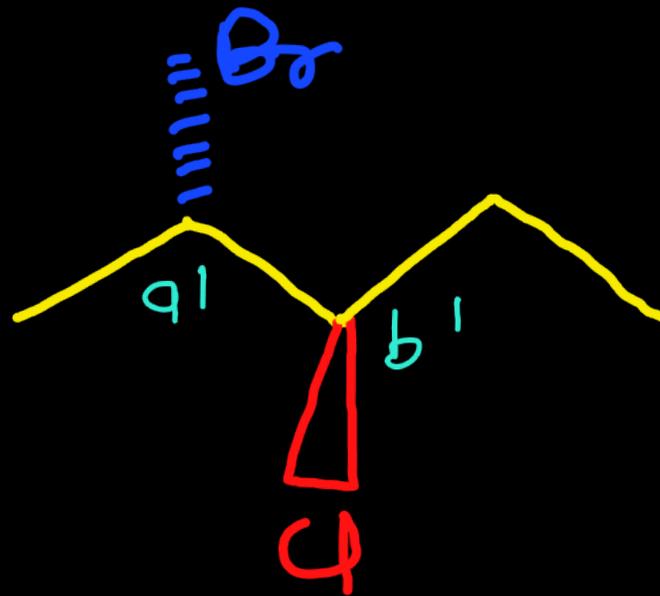
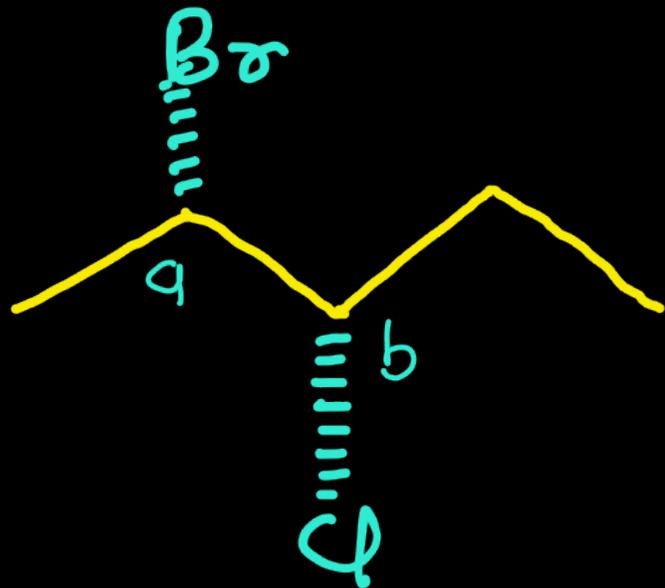


a → a' (Dash → wedge change)

b → b' (No change)

Diastereomers ✓

6

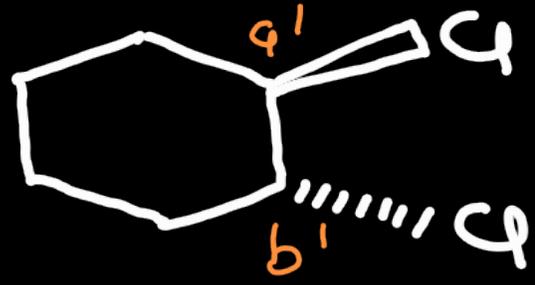
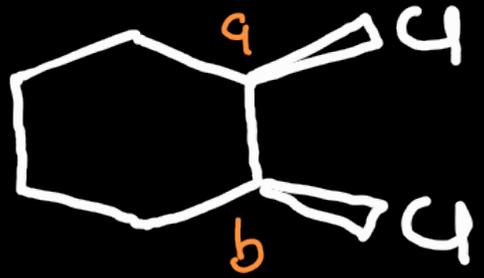


$a \longrightarrow a'$ (No change)

$b \longrightarrow b'$ (change dash \longrightarrow wedge)

Diastereomers. ✓

7

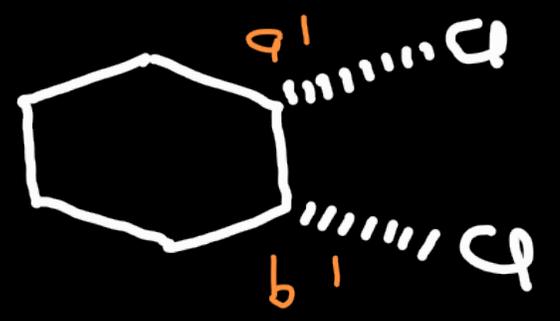
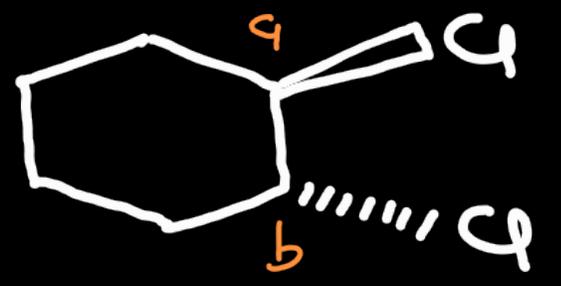


$a \longrightarrow a'$ (No change wedge \longrightarrow wedge)

$b \longrightarrow b'$ (change wedge \longrightarrow dash)

Diastereomers.

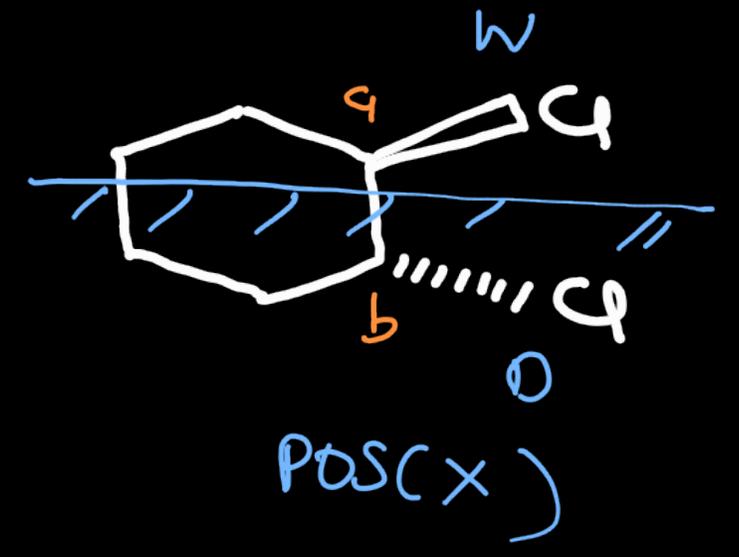
(8)



$a \rightarrow a'$ (change)

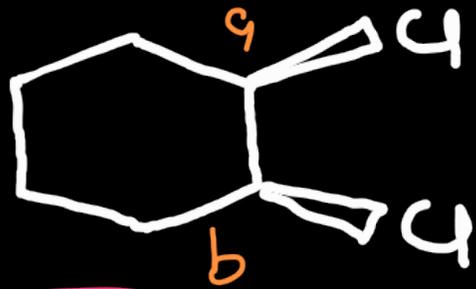
$b \rightarrow b'$ (No change)

Diastereomers.



POSC(X)

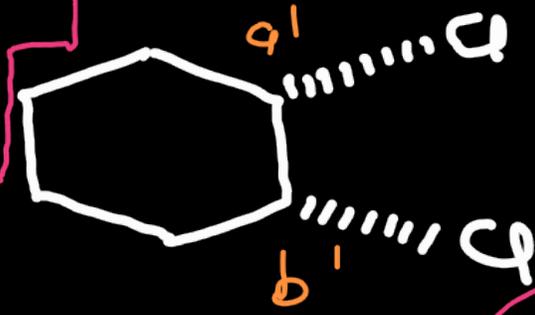
9



Meso

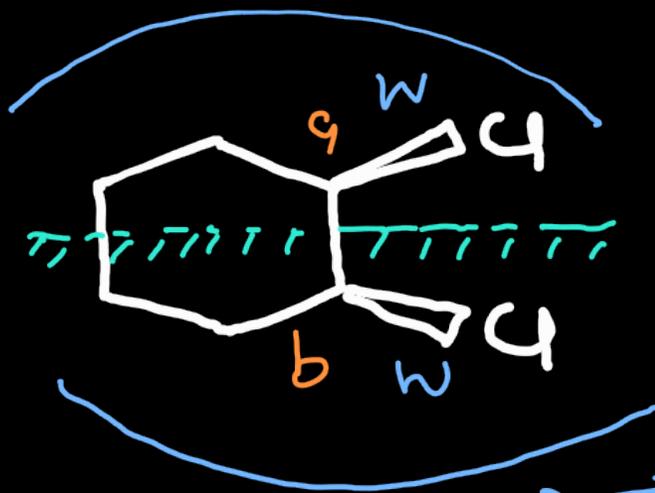
a	a'	b	b'
R	R	R	R
S	S	S	S

Identical



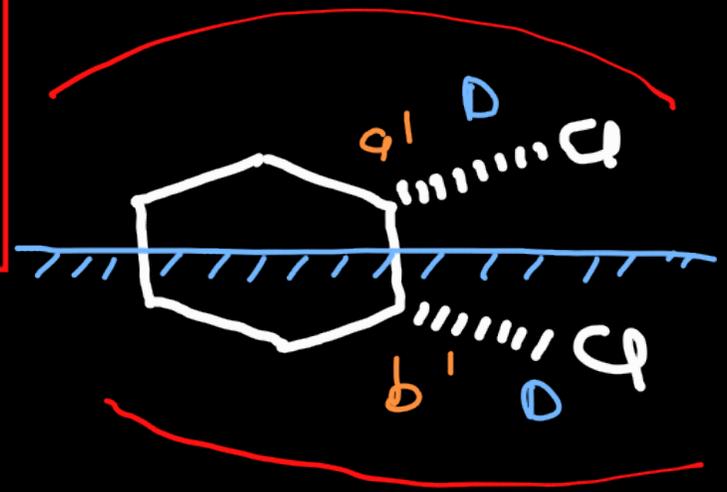
Meso

2 Chiral Centre
and pos
meso



Meso

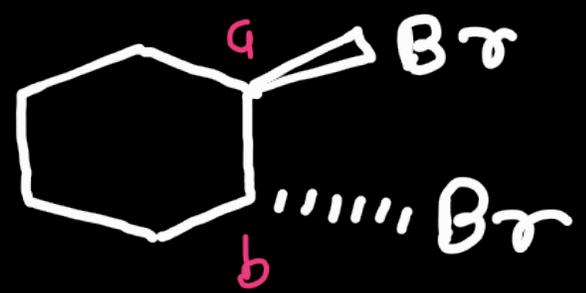
pos (v) ⇒ Meso



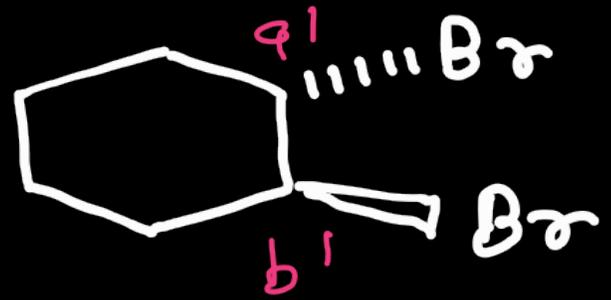
Meso

pos (v)

10



Meso (x)



Meso (x)

a → a' (change)

b → b' (change)

Enantiomers.