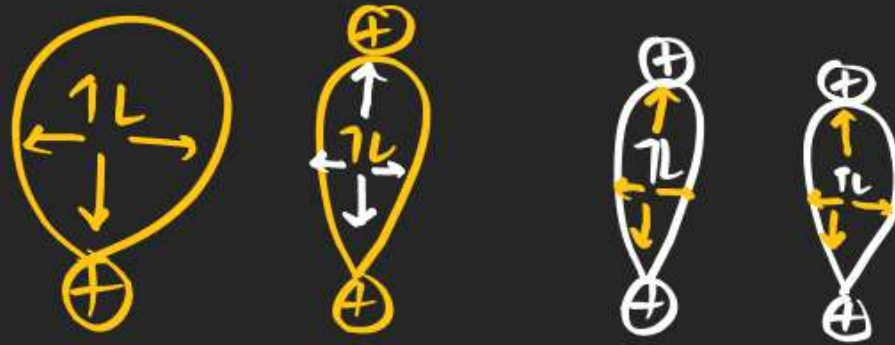
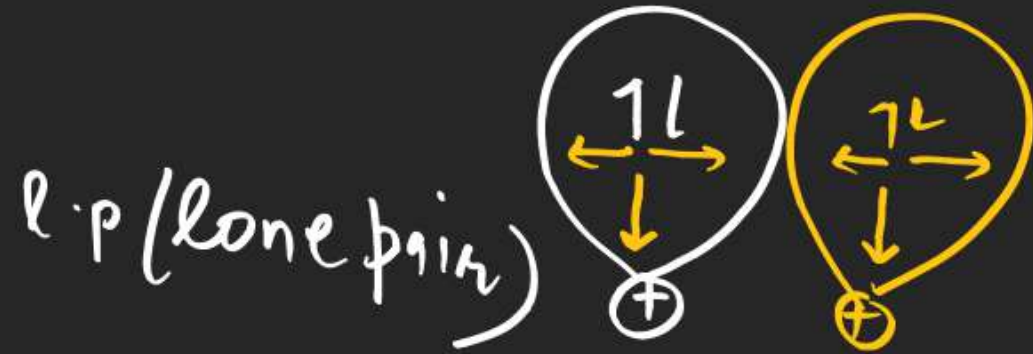


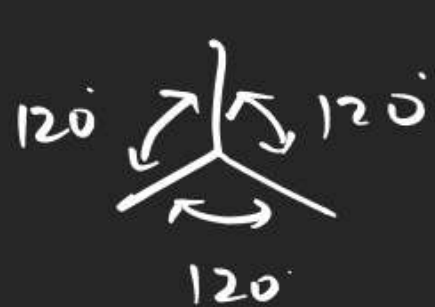
# V.S.E.P.R [Valence shell e<sup>-</sup> pair Repulsion theory]

$$L.P-L.P > L.P-B.P > B.P-B.P$$



B.P (Bond pair)

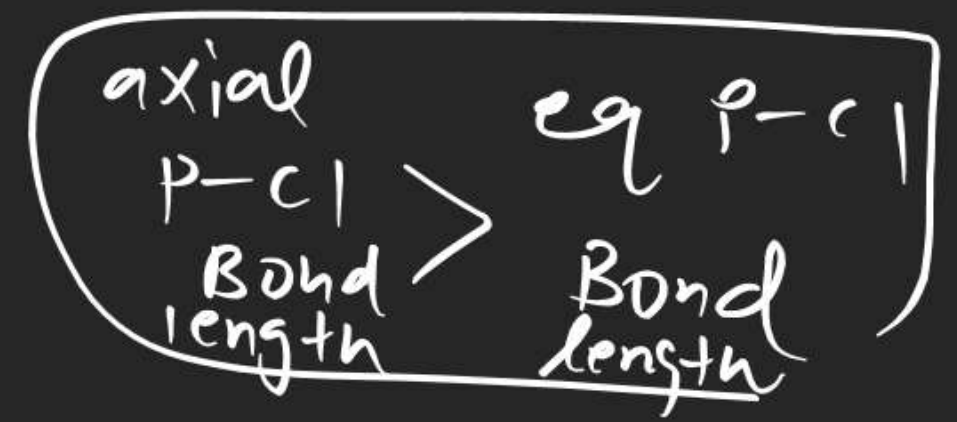
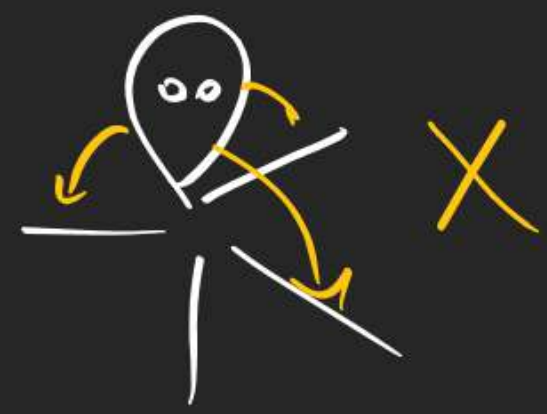
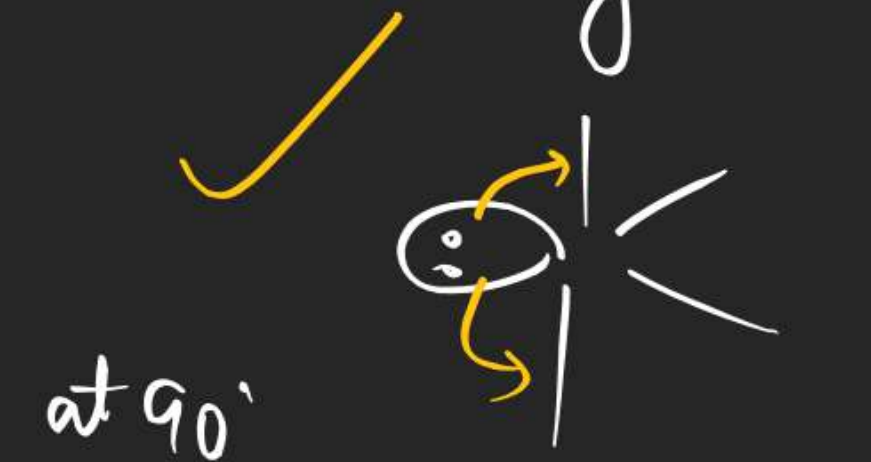
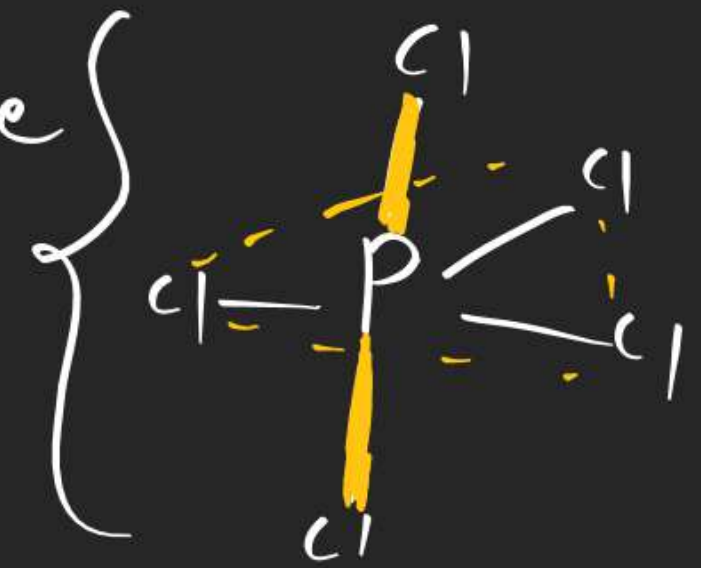
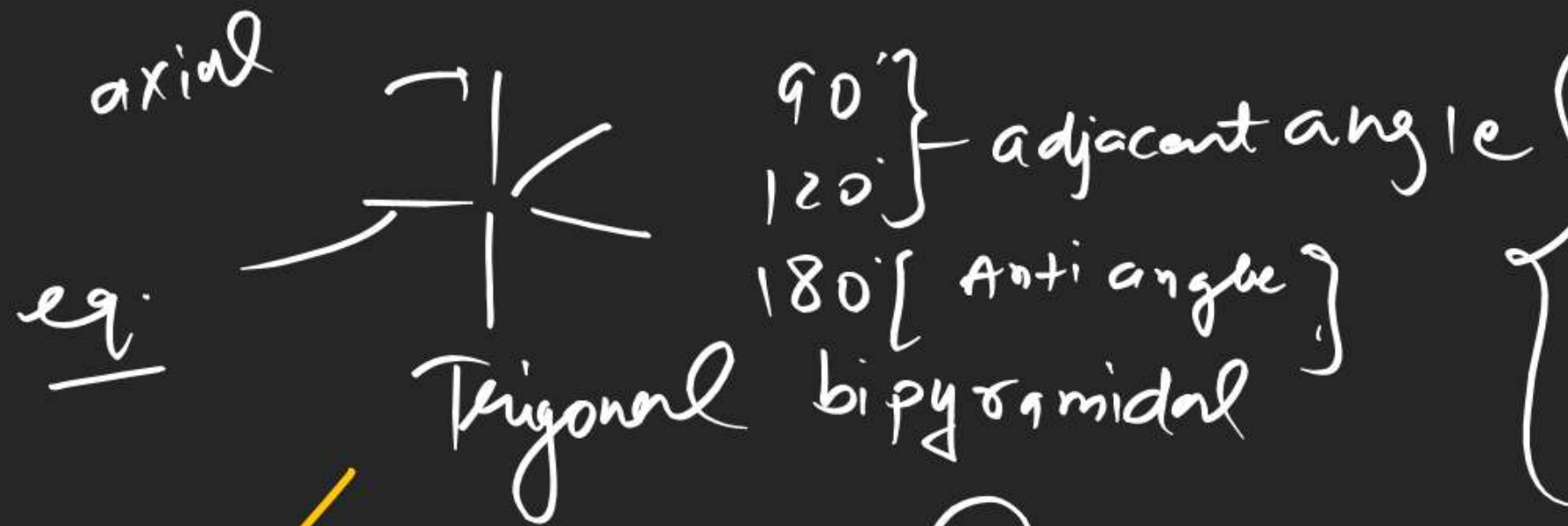






109-5°





$l.p - B.P = 2$

See-saw

$l.p - B.P = 3$

X



at go

$$L.P - L.P = 0$$

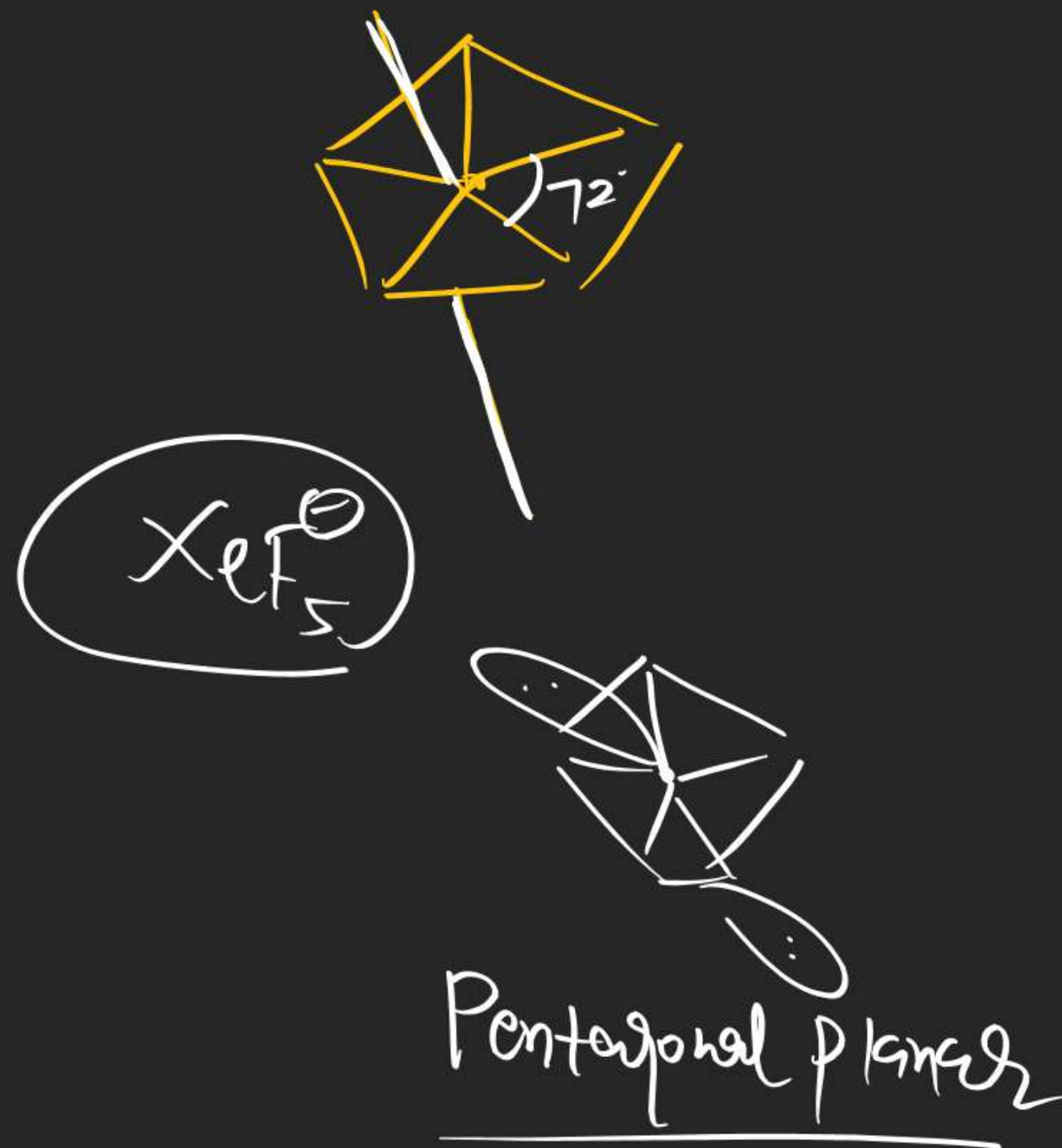
$$L.P - B.P = 4$$

Bent-T  
Shape







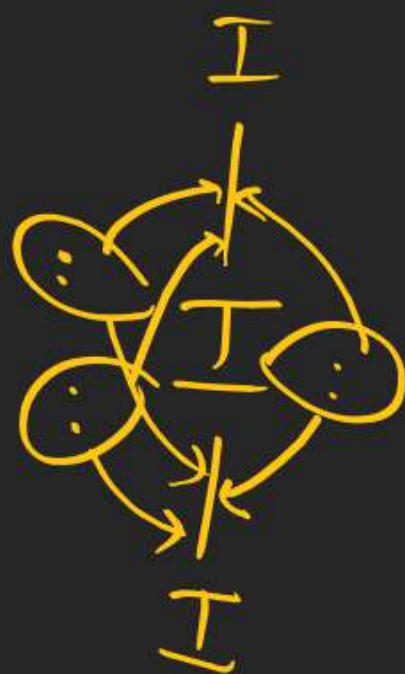


Ques find the number

of L.P-B.P

repulsion in  $\text{I}_3^-$

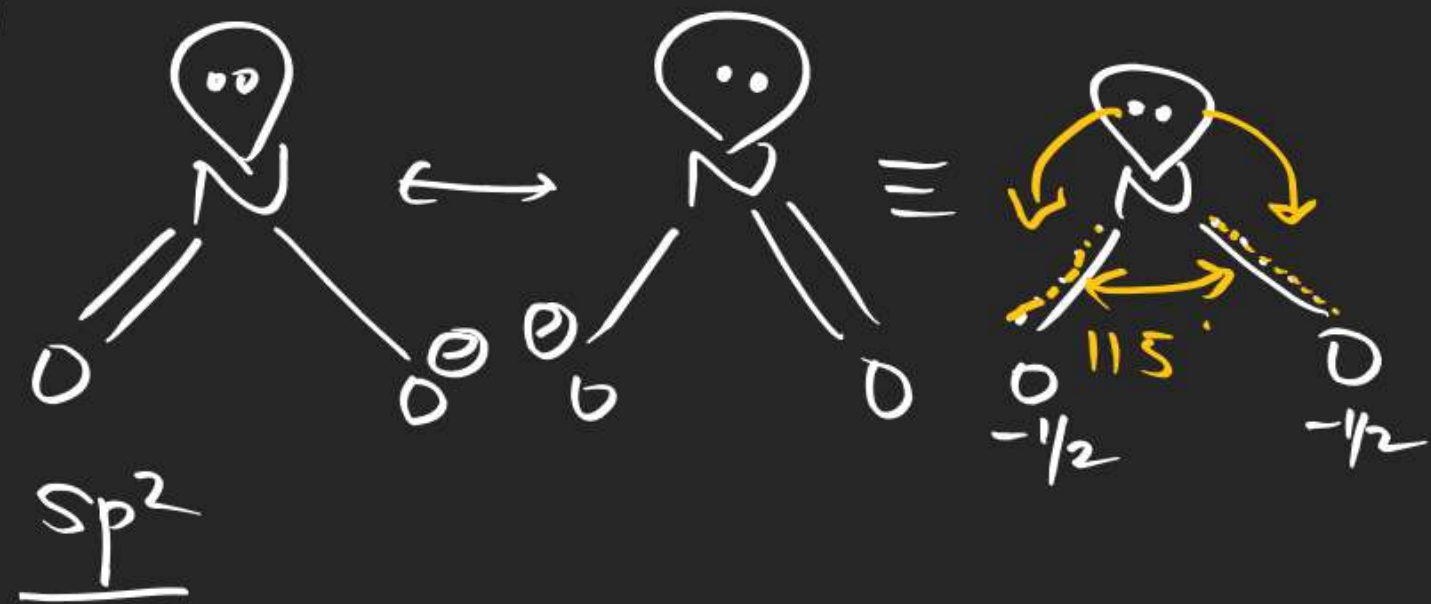
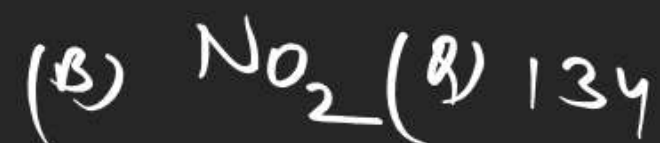
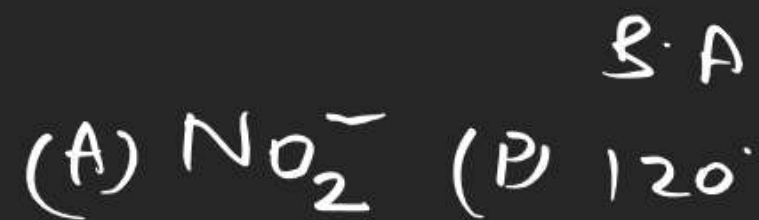
Ans = 6

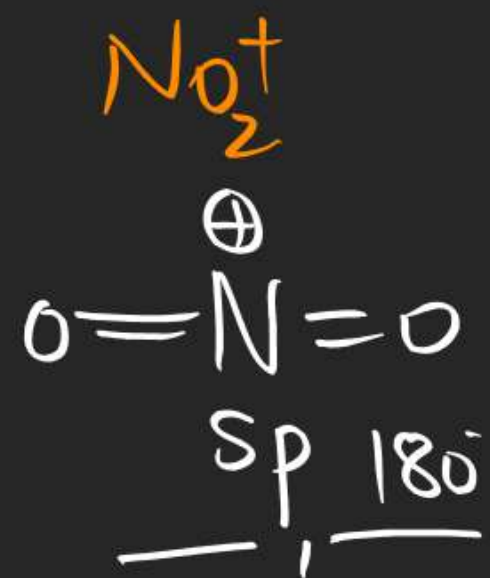
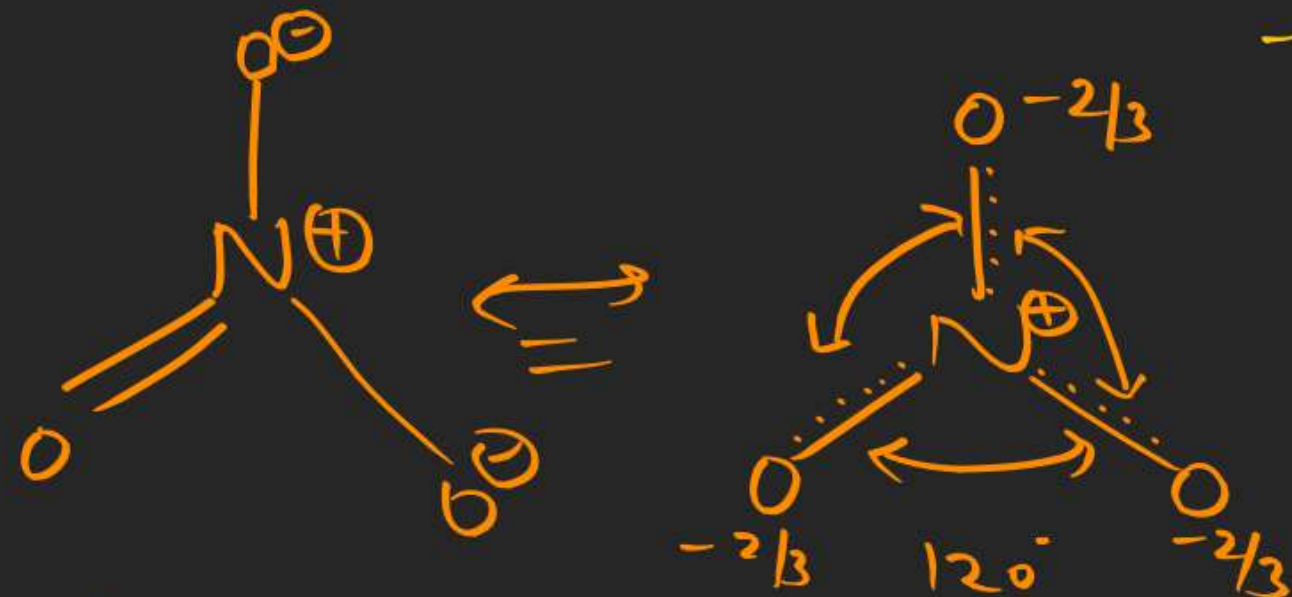
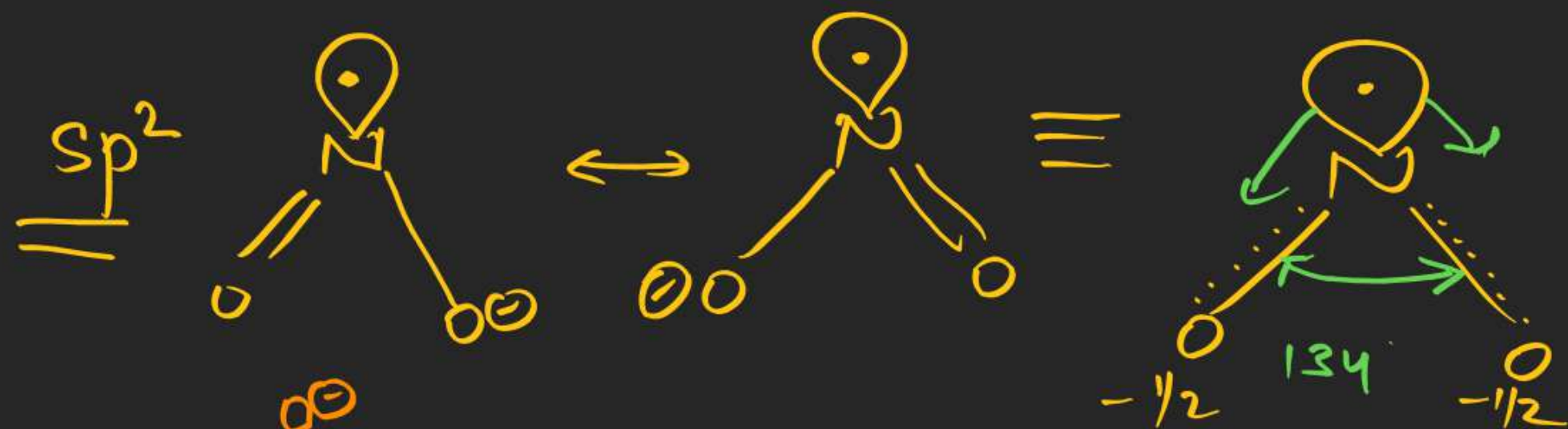


$$2 + 3 = 5$$

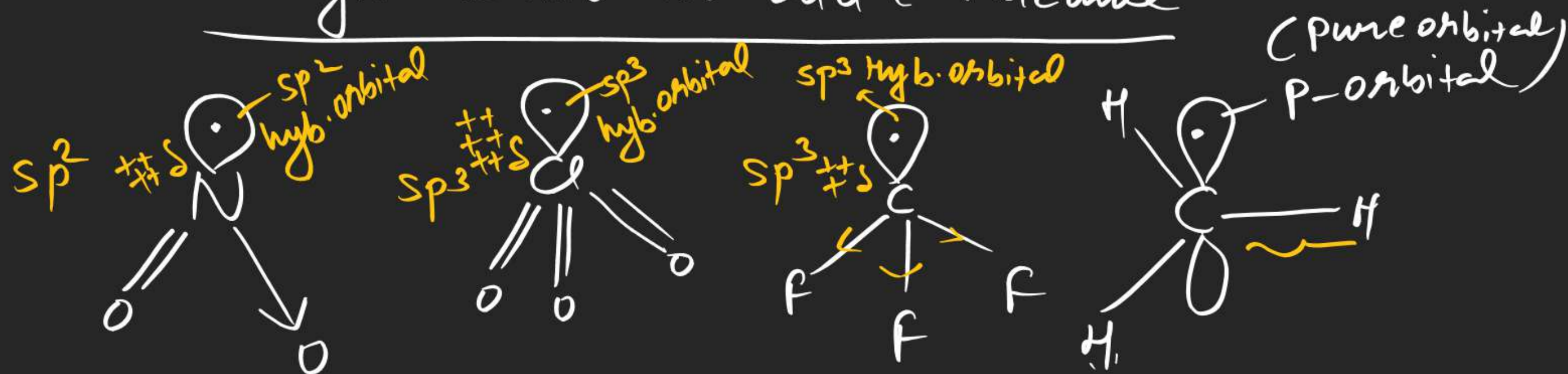
$\text{sp}^3\text{d}$







# Hybridisation in odd $e^-$ molecule



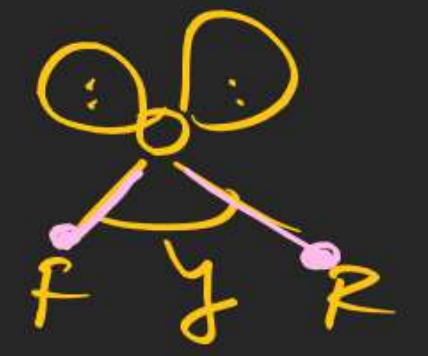
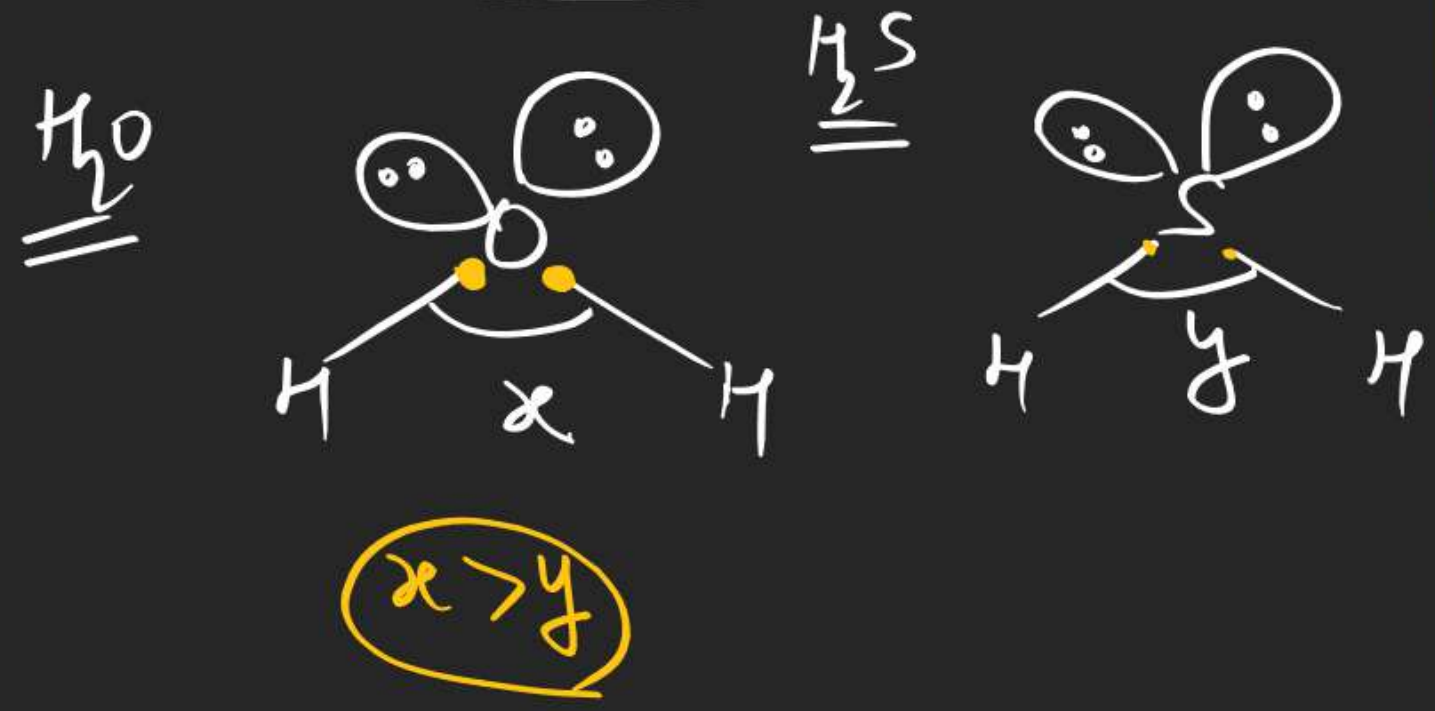
a c.c. to fact, orbital having odd  $e^-$  present at high energy level so it does not involve in hyb

but if S.A atom is more  $E_{\text{in}}$  than central atom  
 then it developed partial positive charge on central atom  
 so orbital contracts toward central atom and involve in hyb.

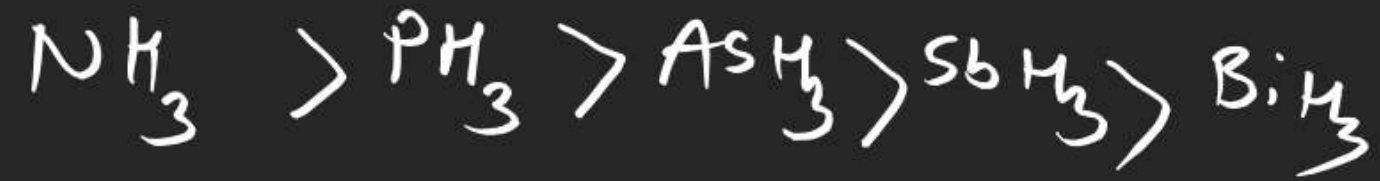


$$B \cdot A \propto \varepsilon \cdot N \text{ of } C \cdot A$$

$$B \cdot A \propto \frac{1}{\varepsilon \cdot N \text{ of } S \cdot A}$$



Order of B.A



N	O
P	S
As	Se
Sb	Te
Bi	Po

↓ E.N ↓ B.A ↓

B.A & E.N ↑ C.A

