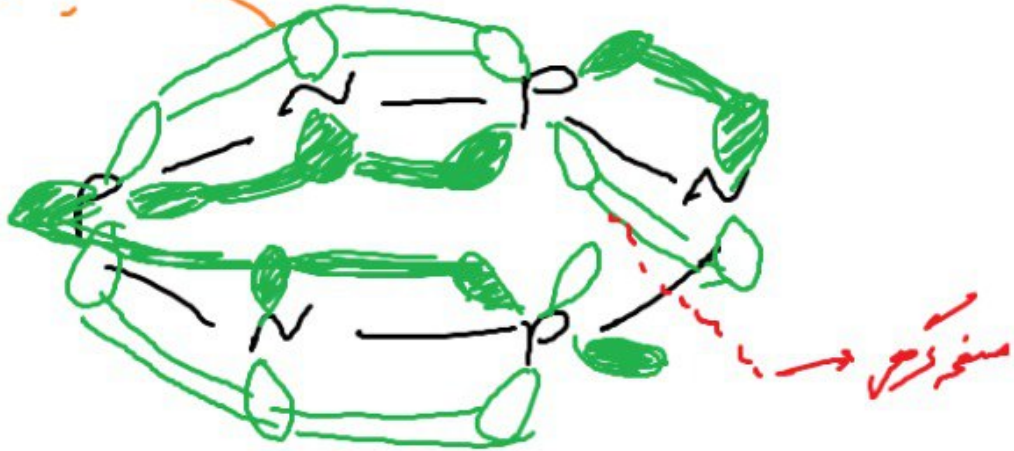


آرودمانتیکسینت



قاعدہ معمولی سے تعداد  $e^-$  کی زیادہ نہیں درسیسم  $n$

زنجیر حلقوی  $4n+2$  باہرہ سیسم آرودمانتیکر  
2, 6, 10, ...

دیایدار واٹر  $4n$  باہرہ ہضہ ہ  
4, 8, ...

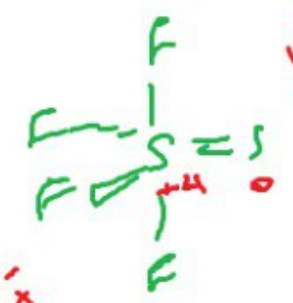
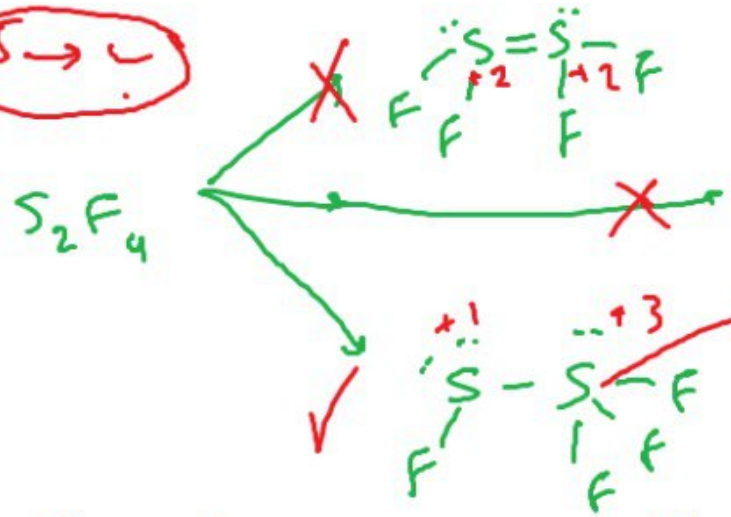
دیایدار

سیسم کی باارہ سیسم آل  $n$

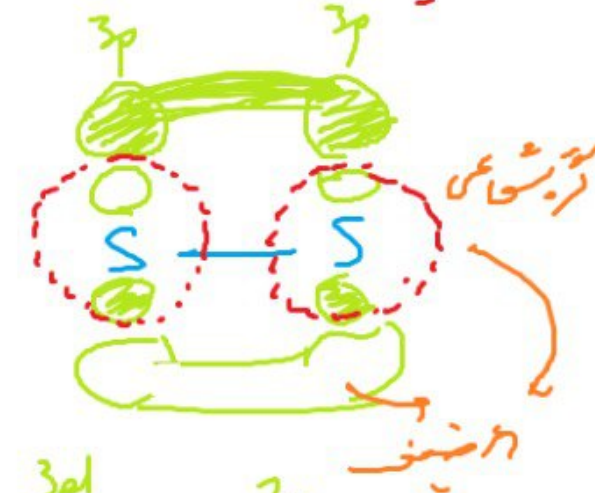


①

ب → 5



نکته: پیوندهای سوابد سولفور به عبارتی ضعیف است



اعداد گرایش ششگانه 1-2-n نکته: پیوندهای گانه O=O, NN, و F-F ضعیف است.



خول پیوند به نسبت کوتاه،  
↓  
«ضعیف بودن» این بنا پیوندی



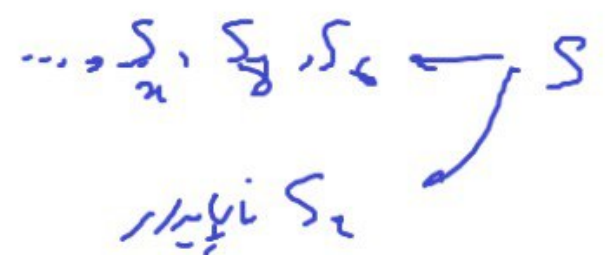


سوفت مرشد

سیر ناپایدار



راصه بجز



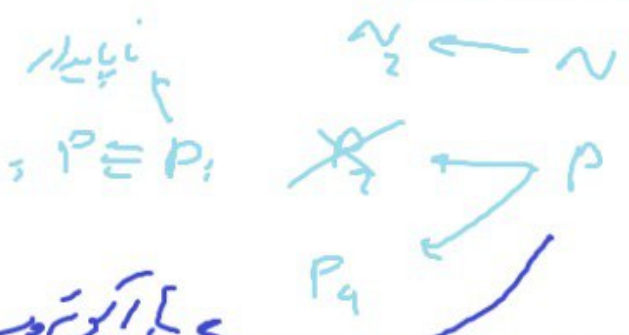
C-C 347 (σ)	N-N 160 (σ)
C=C 614 (π <sub>1</sub> 267)	N=N 418 (π <sub>1</sub> 250)
C≡C 839 (π <sub>2</sub> 225)	N≡N 945 (π <sub>2</sub> 527)

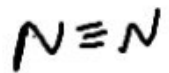
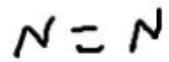
O-O 142
S-S 263
O=O 498
S=S 431

همان با پیوند ساده هستند

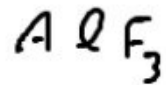
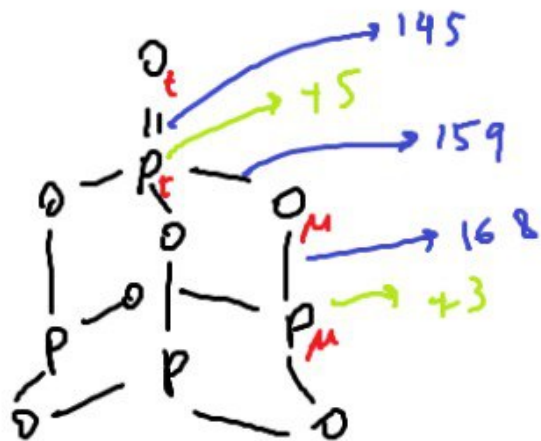
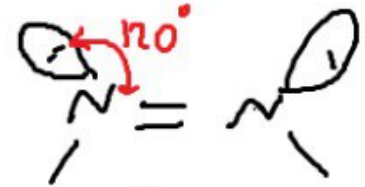
آکسید هم آن را پیوند ساده هستند

3

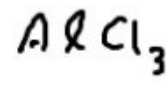




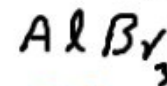
استدلال منفرجه  
تقریباً همونقدر  
تغییر برای بررسه درجه  
قدرت استتبه  
کاملاً



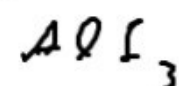
1290



192



98



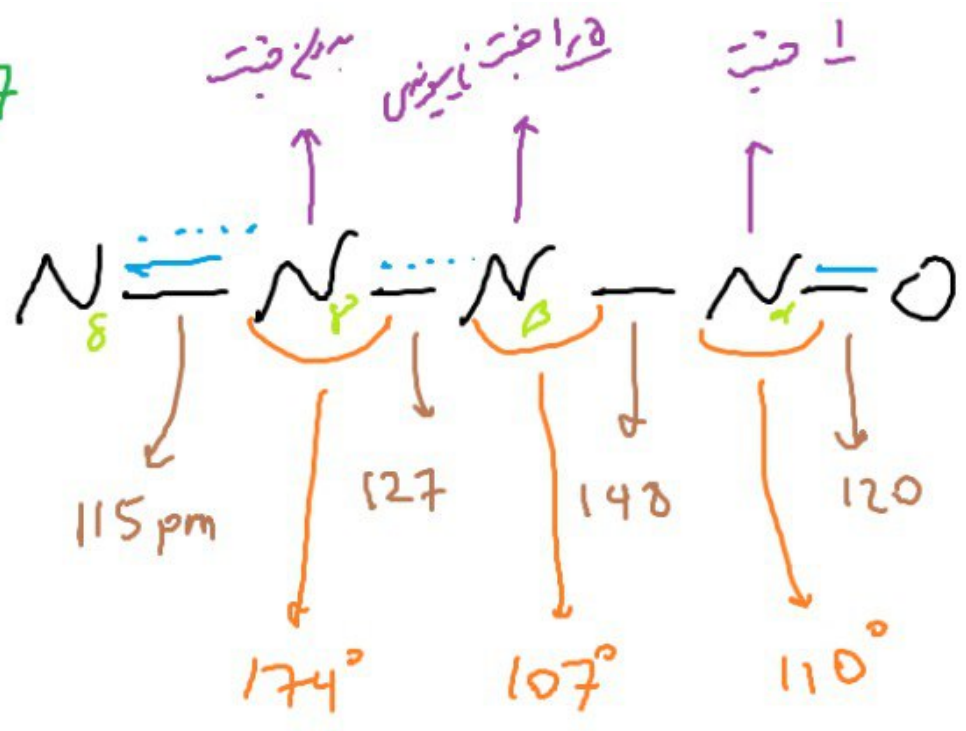
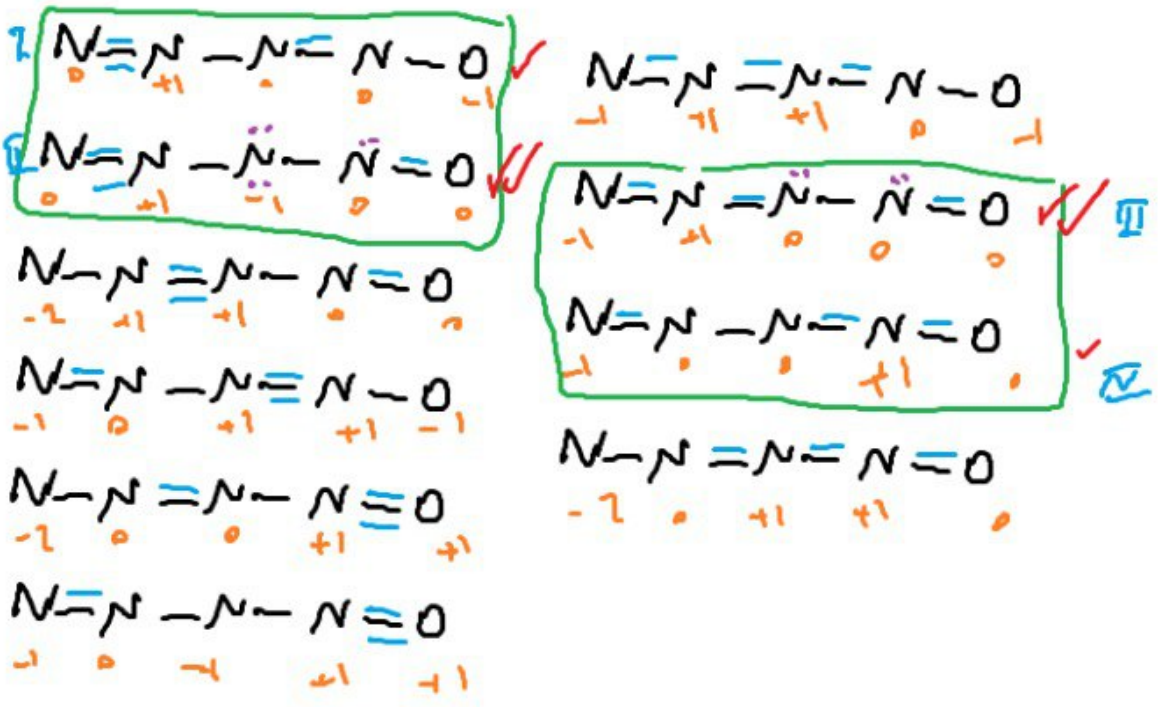
189

mp/c

4

11 → 2

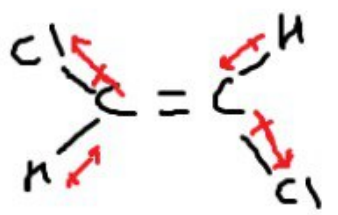
$$\left. \begin{aligned} a &= 4 \times 5 + 1 \times 6 = 26 \\ b &= 5 \times 8 = 40 \end{aligned} \right\} \rightarrow \frac{40 - 26}{2} = 7$$



5

(21 → 2)

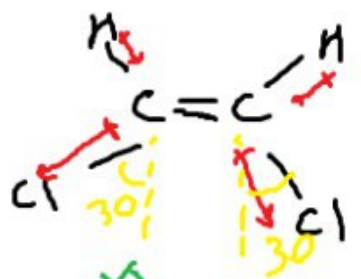
$\mu = 0$



- $r_{H^-}$
- LiH 130 pm
  - NaH
  - KH 152
  - RbH 154

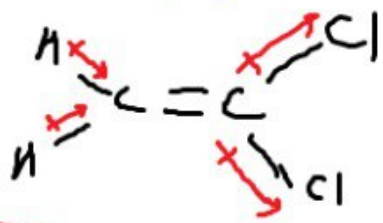
(19 → 1)

1.90



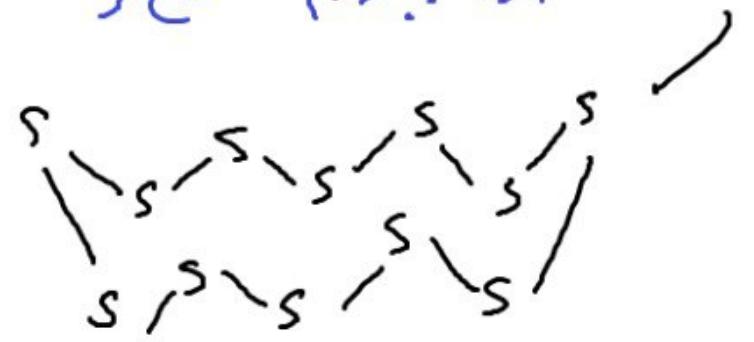
$\Delta \chi \uparrow \rightarrow$    
 $r_c \uparrow \rightarrow r_a \uparrow$

1.34



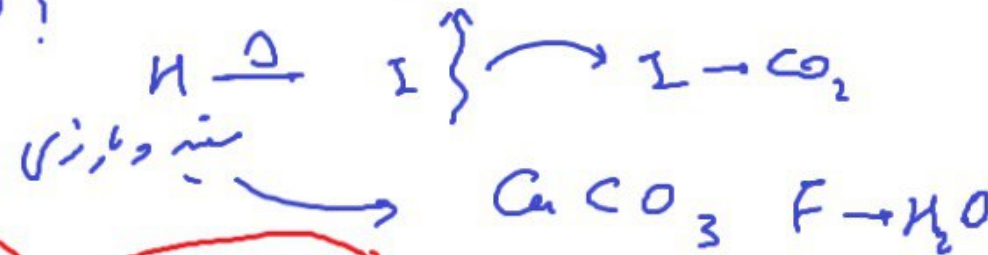
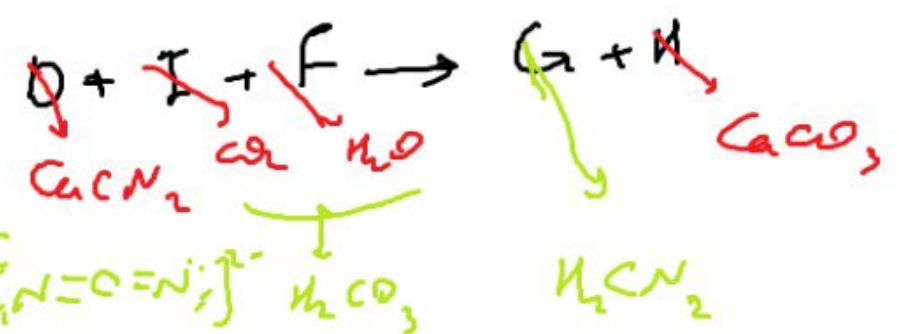
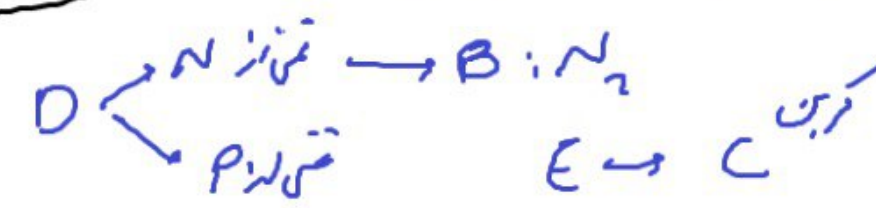
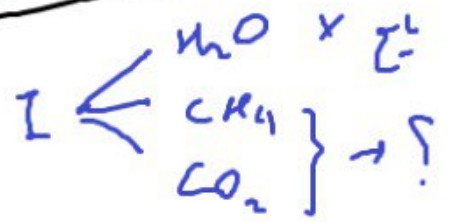
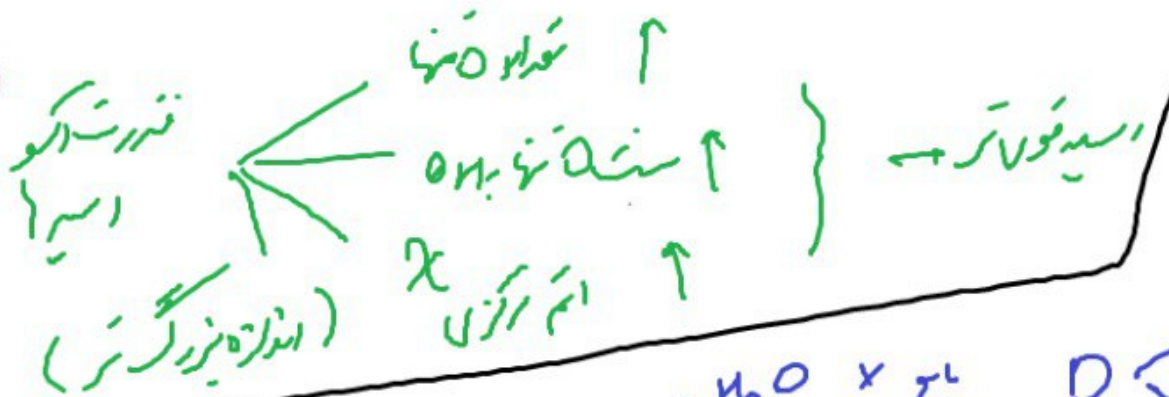
(22 → 1)

$S_{12}$  ← مع جرم بیشتر در ستاره است



(6)

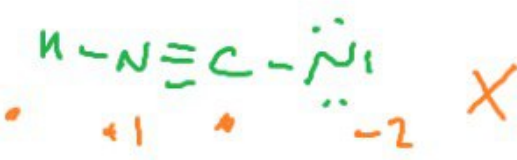
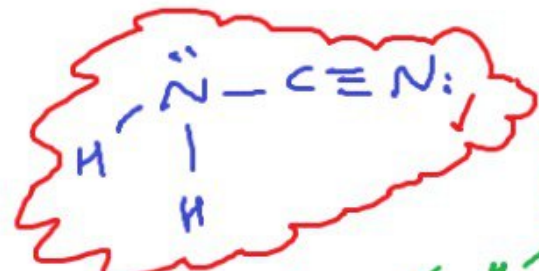
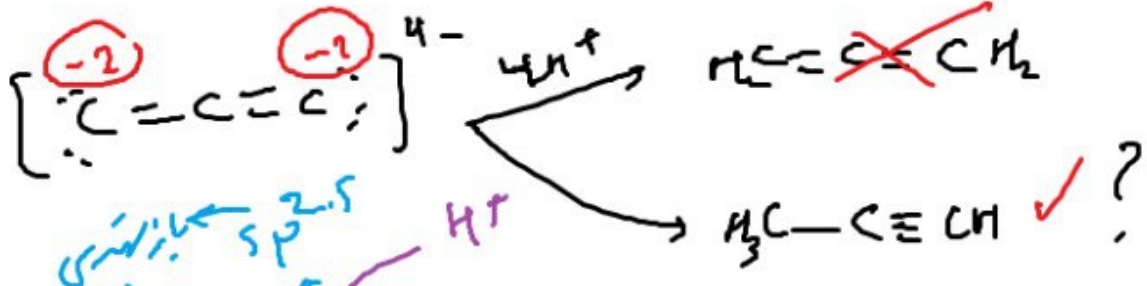
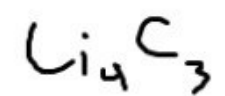
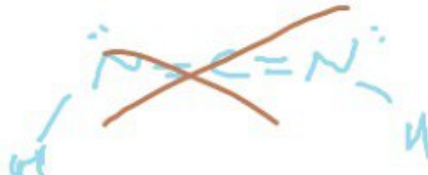
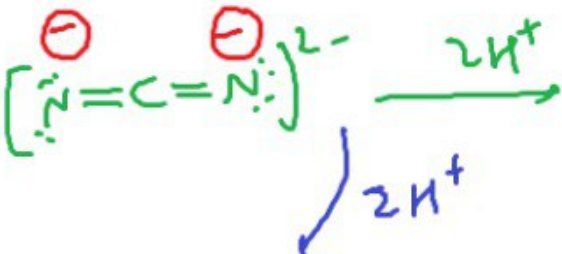
الف → 23



27 →

28 →

7



در واقعیت به علت داشتن H الکترون دهنده مستقرتر می شود.





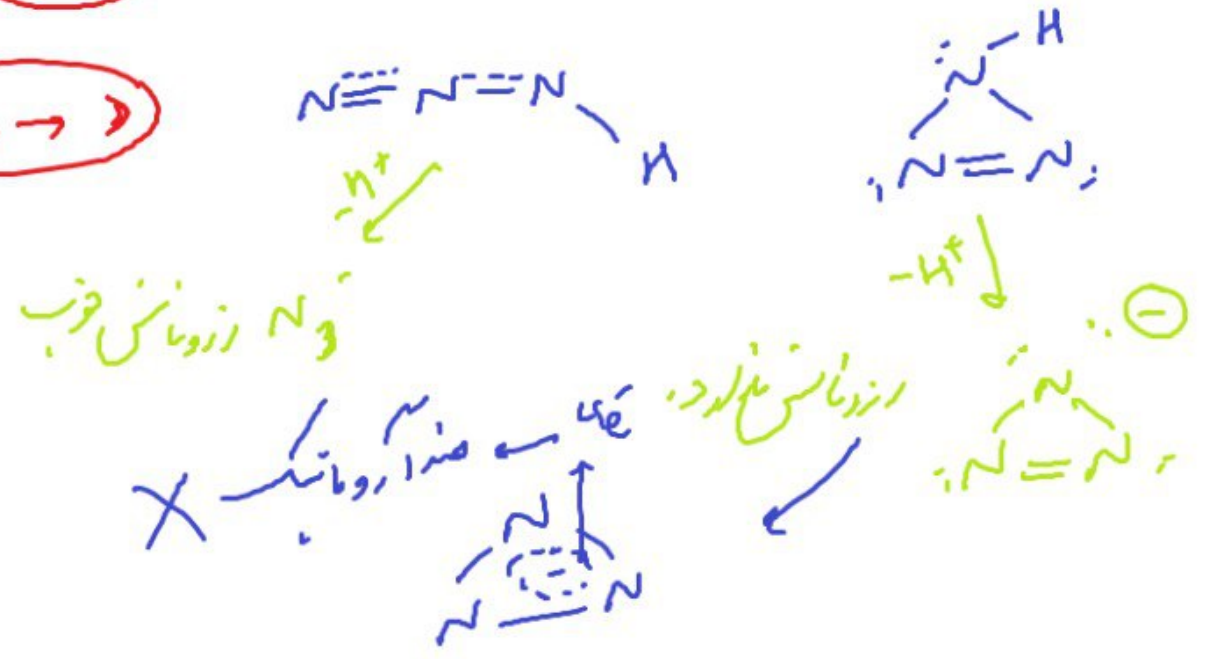
اسم: نیتروژن لیتیم



18 →

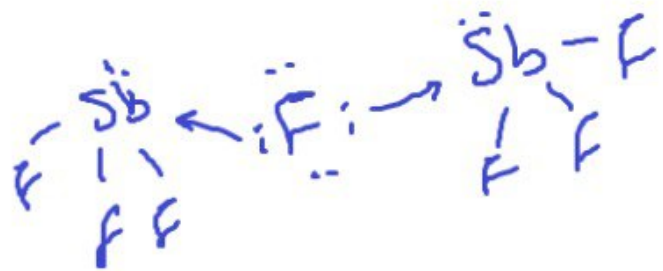
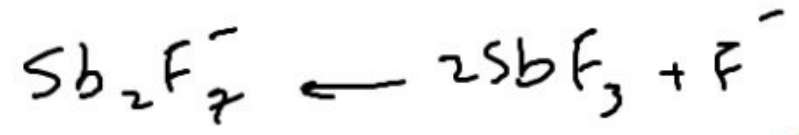
12 →

$\text{LiBH}_4$        $\text{LiAlH}_4$   
 کاهنده قوی      کاهنده متوسط



10 →

7 → 2

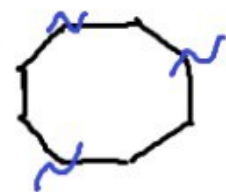
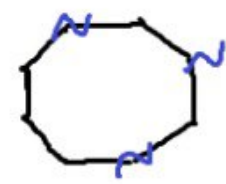
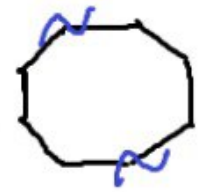
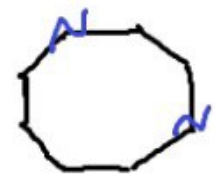
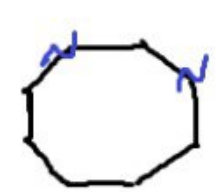
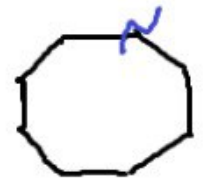


سوفور پورین داریم؛  
 ایل - ۲ - انتهای استوایی  
 سه - انتهای محوری

الف → 4



الف → 3

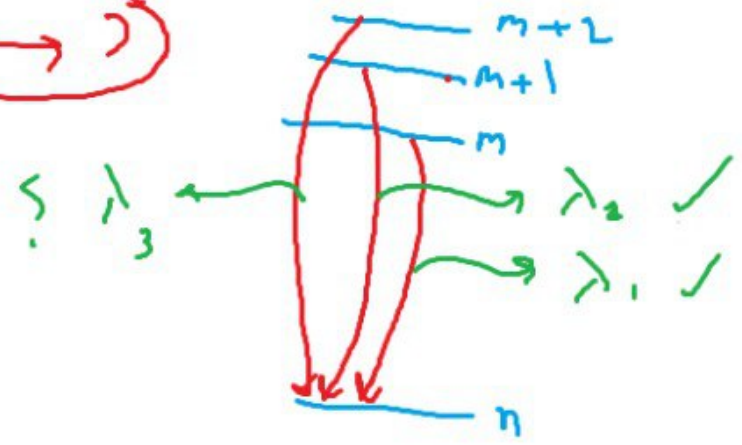


2 → 1

انتقال ریزی

s p d f  
 ↓ ↑  
 سبب انبساط ریزی

1 → 2



$\Sigma_2$  Sb :  $5s^2 5p^3$  →  $\Sigma_1$

Bi :  $6s^2 6p^3$

1026 Å

$$\frac{1}{\lambda_1} = R_H \left( \frac{1}{n^2} - \frac{1}{m^2} \right) \rightarrow \frac{1}{\lambda_1 R_H} = \frac{1}{n^2} - \frac{1}{m^2}$$

$$\frac{1}{\lambda_2} = R_H \left( \frac{1}{n^2} - \frac{1}{(m+1)^2} \right) \rightarrow \frac{1}{\lambda_2 R_H} = \frac{1}{n^2} - \frac{1}{(m+1)^2}$$

973 Å

$$\frac{1}{\lambda_2 R_H} - \frac{1}{\lambda_1 R_H} = \left[ \frac{1}{n^2} - \frac{1}{(m+1)^2} \right] - \left[ \frac{1}{n^2} - \frac{1}{m^2} \right]$$

$$\Rightarrow \sim = \frac{1}{m^2} - \frac{1}{(m+1)^2} \rightarrow m=3 \rightarrow n=1$$

(11)