



الف → 1

$$E_n = -2.18 \times 10^{-18} \frac{Z^2}{n^2} \text{ (J)}$$

مقدار (1) / 1

-13.6 eV

$$IE_8 = \left( 2.18 \times 10^{-18} \frac{8^2}{1^2} \right) N_A$$

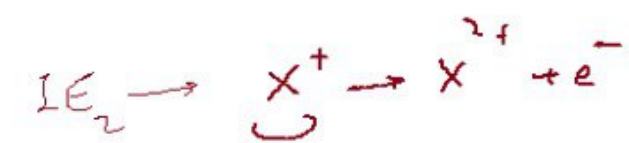
$$= 89 \text{ MJ/mol}$$

$$[E_1(\text{Li}) = 520 \text{ kJ/mol}] \rightarrow Z_{\text{Li}}^* = ? \quad Z^* \leq Z_{\text{eff}}$$

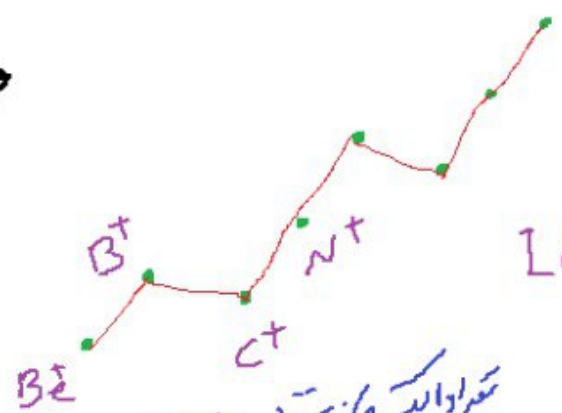
$$\text{Li: } 1s^2/2s^1 \quad E_{2s} = -2.18 \times 10^{-18} \frac{Z^{*2}}{2^2}$$

$$\Rightarrow IE_1 = 520 \times 10^3 = 2.18 \times 10^{-18} \frac{Z^{*2}}{4} N_A \Rightarrow Z^* = 1.26$$

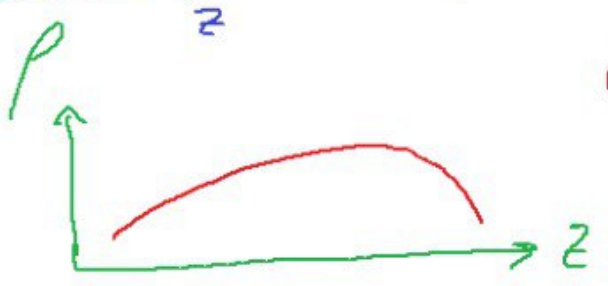
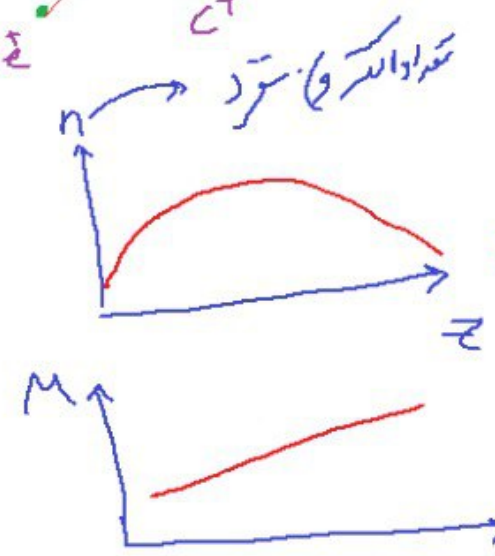
2 →



$IE_2: N > B > C > Be$

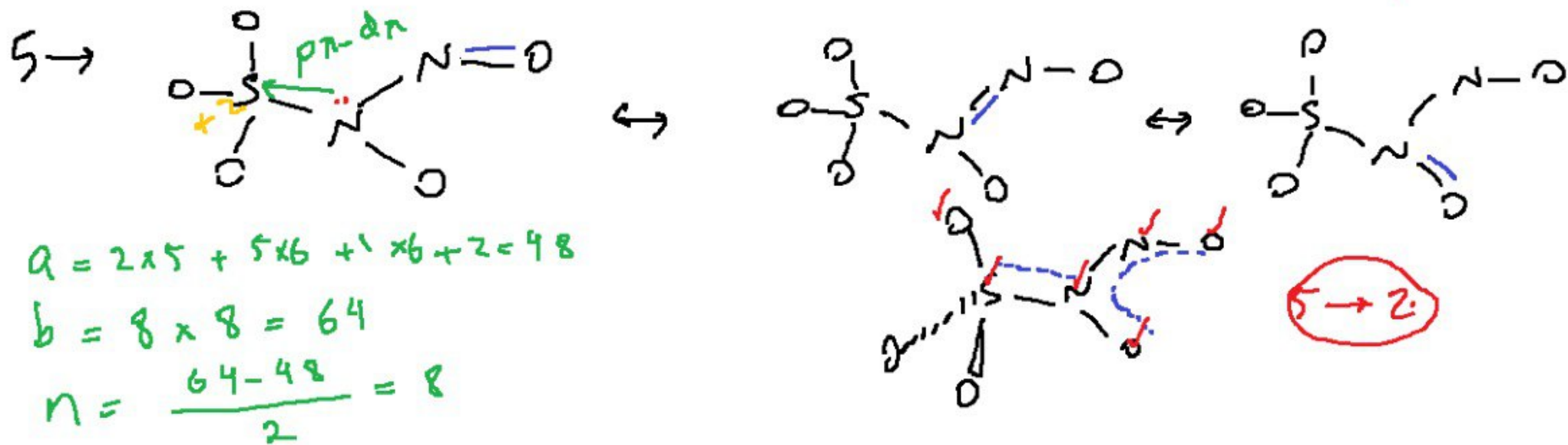
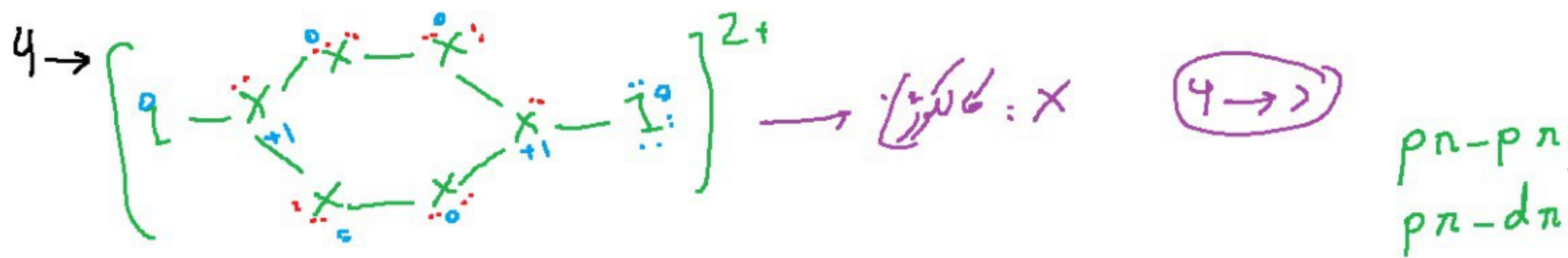


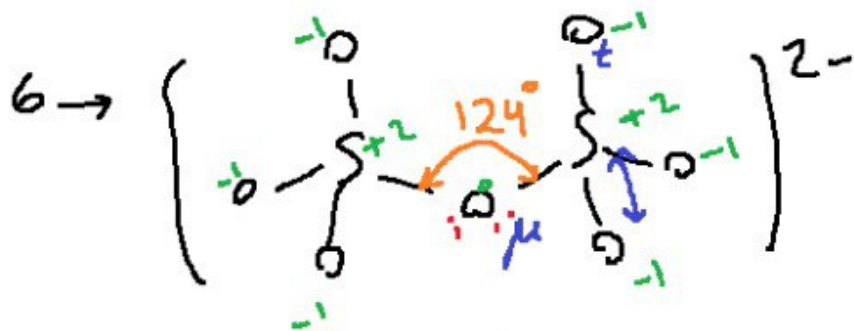
3 →



- $m_p \rightarrow$  نقطه ذوب
- $b_p \rightarrow$  جوش
- $\chi_p \rightarrow$  انرژی یونانization
- $IE \rightarrow$  انرژی یونانization
- $EA \rightarrow$  انرژی جذب
- $\rho \rightarrow$  چگالی

3 →

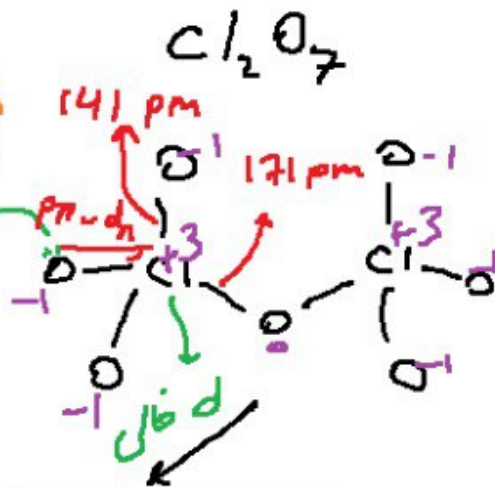




$SO_t < SO_\mu$

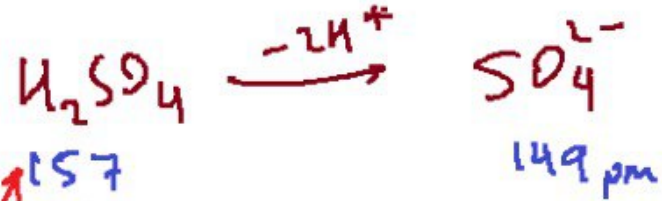
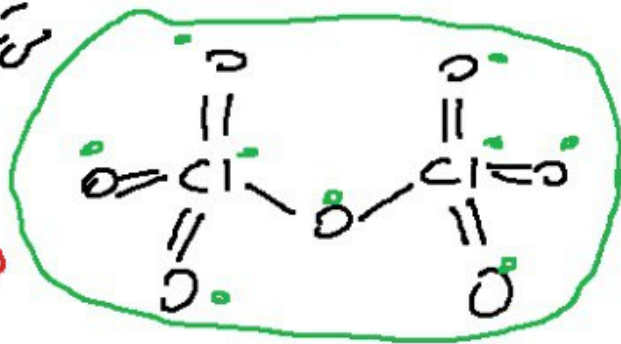


الف → 6

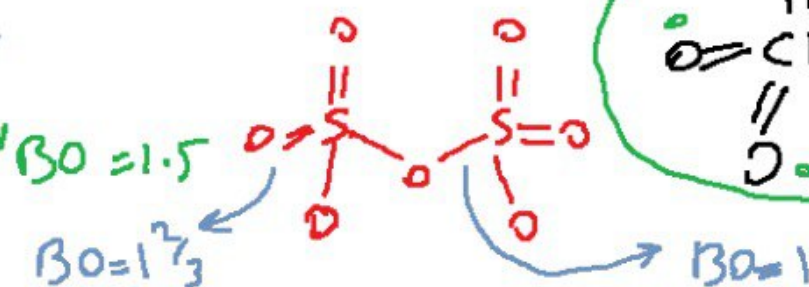
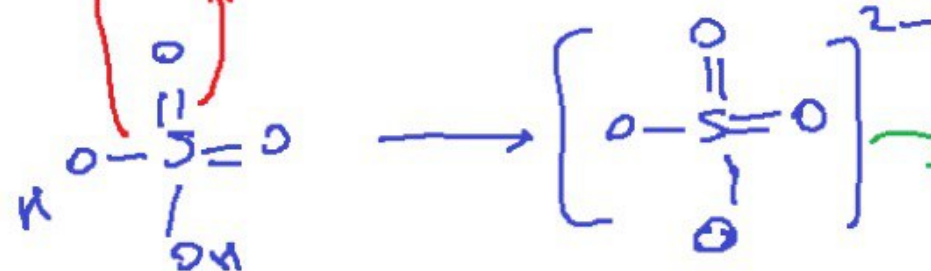


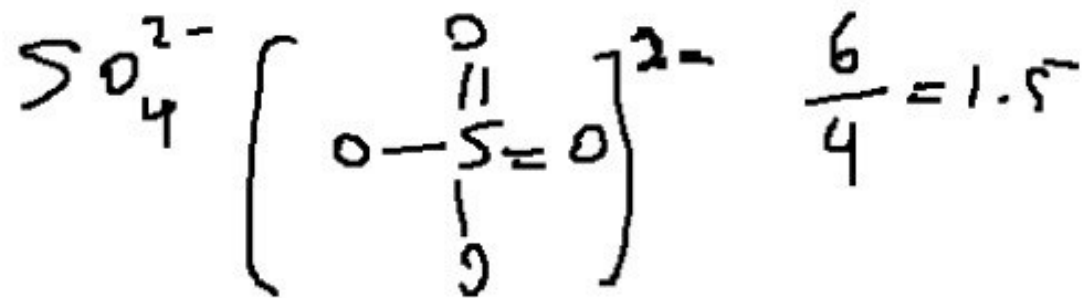
متادوب سوم بر وجه

من کرده بیشتر از آنست بشوند



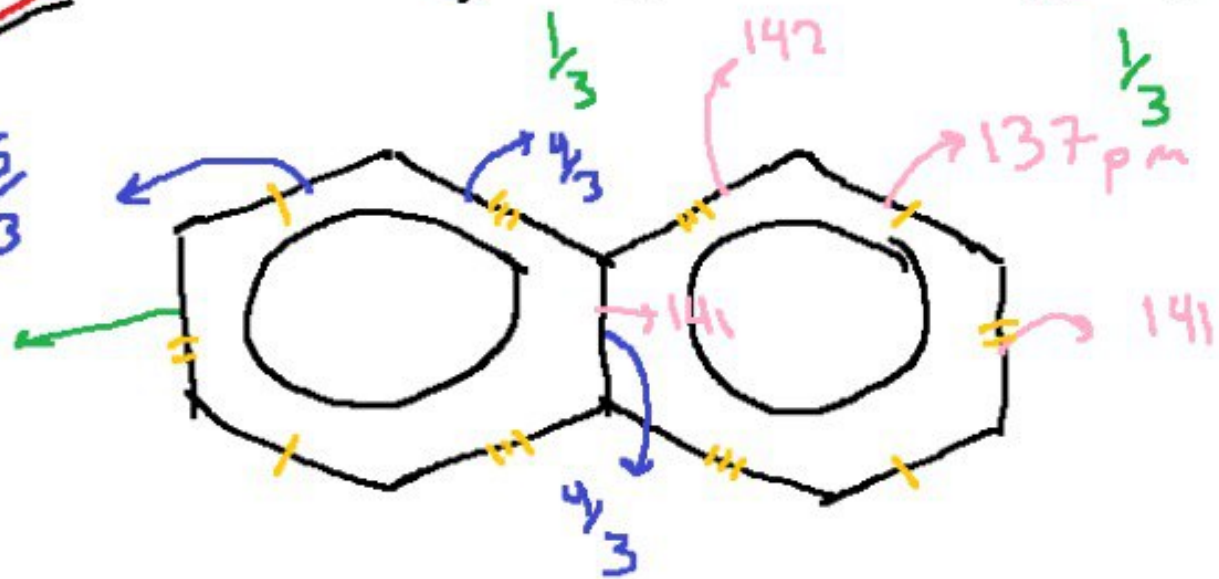
BO  
تربته پیونده

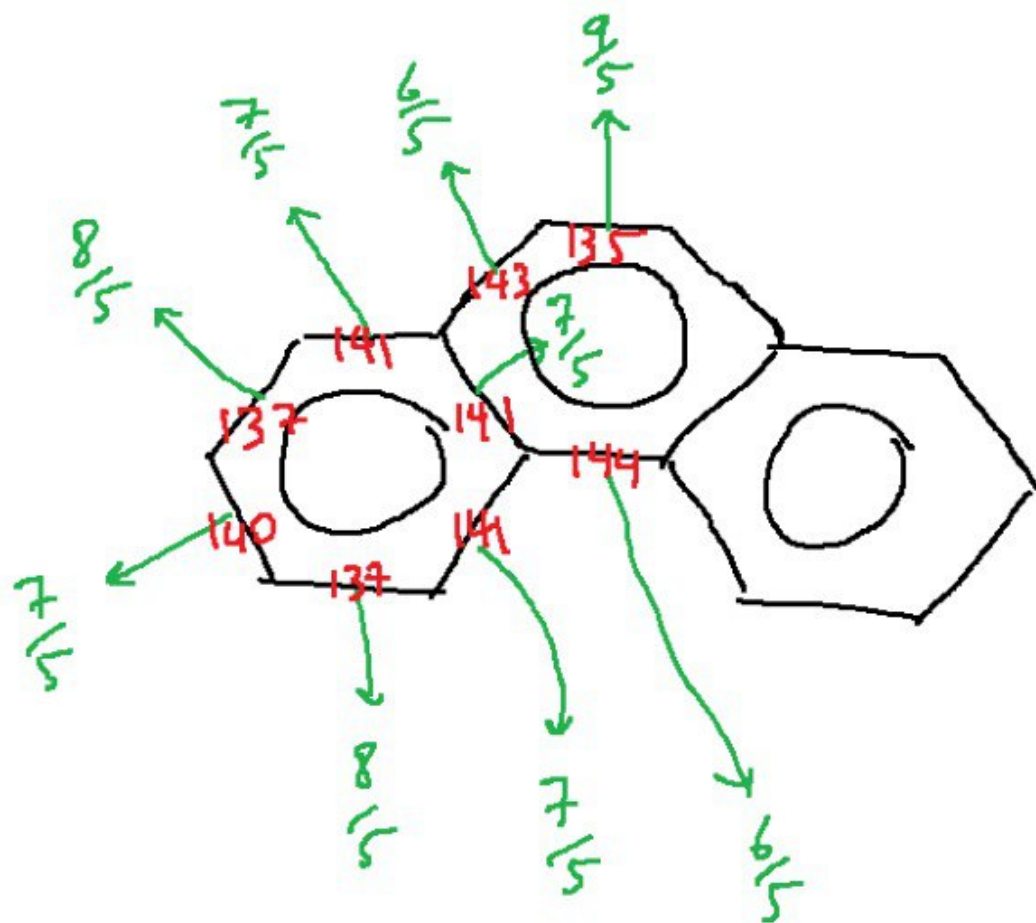
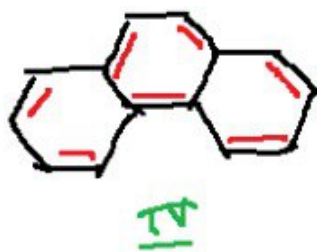
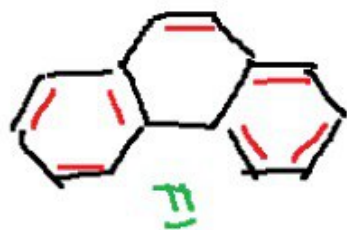
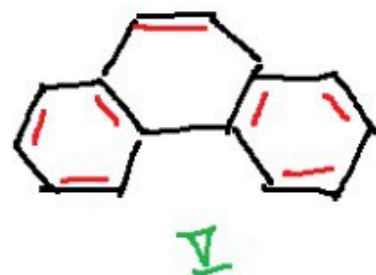
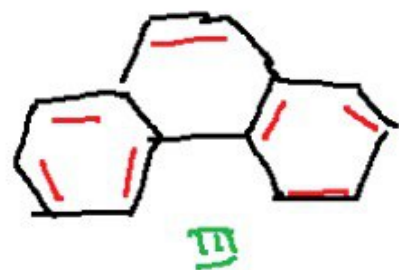
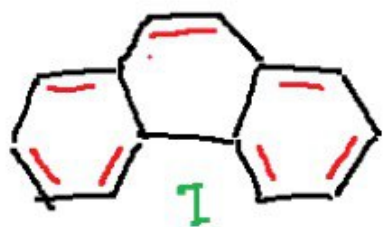




$$\frac{2}{3}(2) + \frac{1}{3}(1) = \frac{5}{3}$$

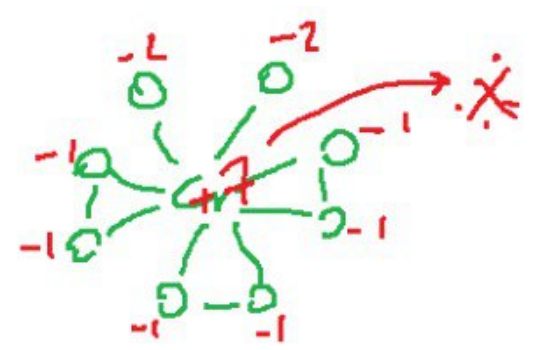
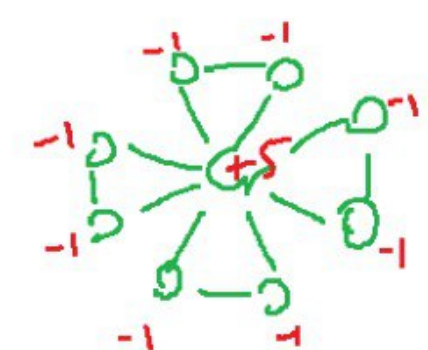
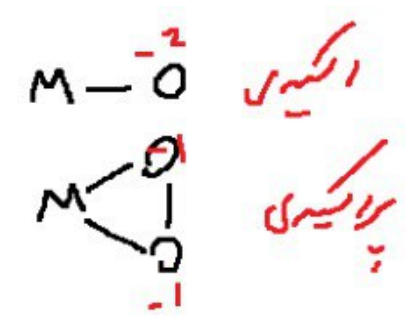
$$\frac{2}{3}(1) + \frac{1}{3}(2) = \frac{4}{3}$$







افزودنی

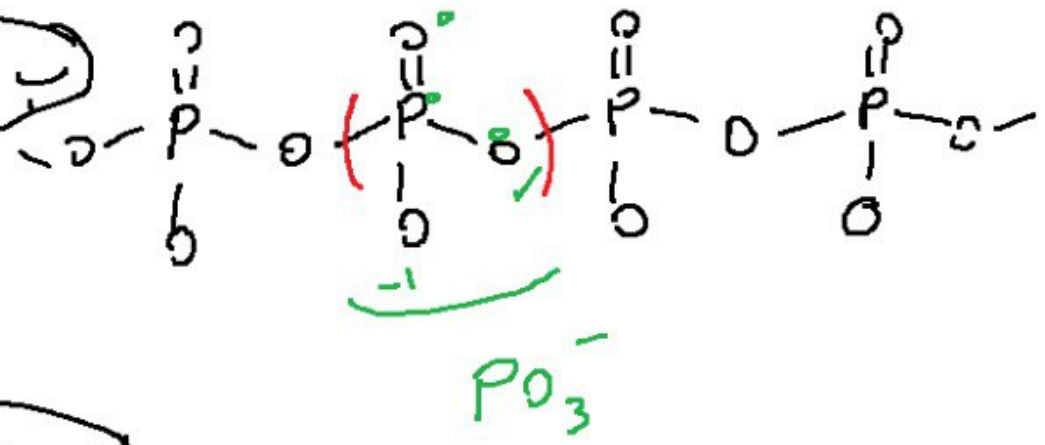


دایا ستایی → از میرا (ستایی) → به پنج تنگ الکترون → کهن رخ  
 به یاما ستایی → با تنگ الکترون → به سیال به خوبی جذب

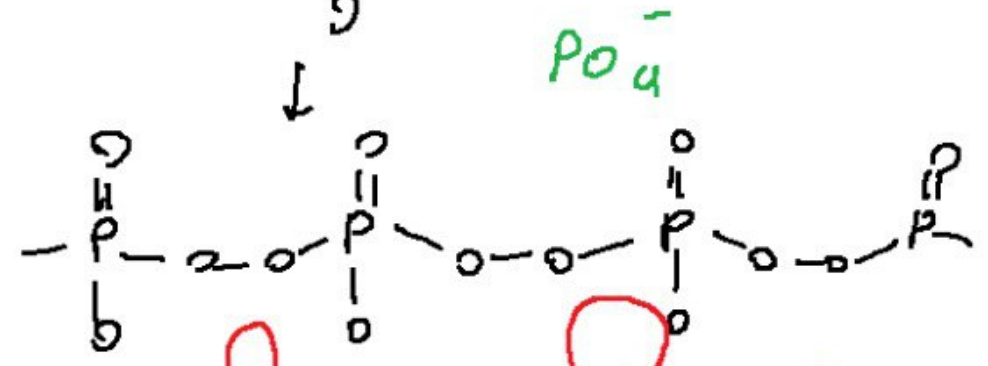
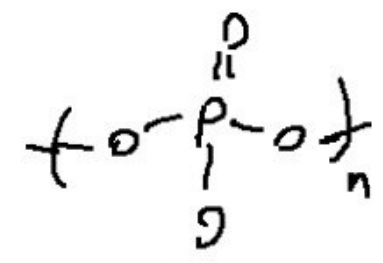
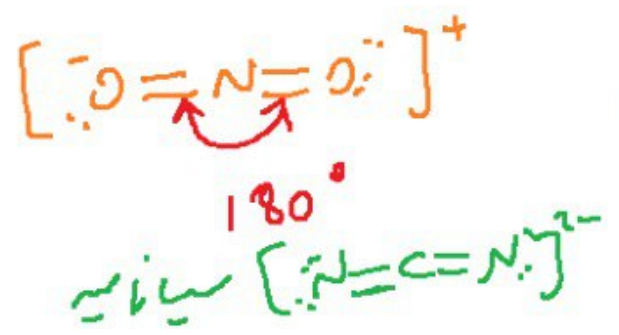
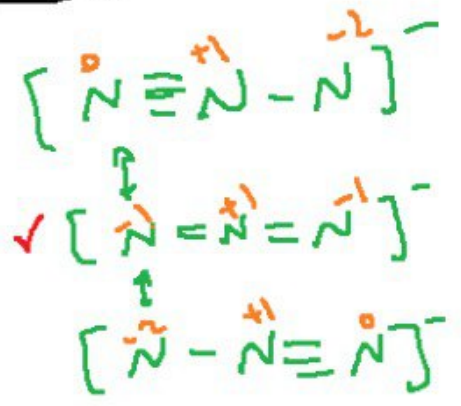
$(Br_2)(Sb_3F_{16})$   
 $2 \times 7 + 3 \times 5 + 16 \times 7 = 141$   
 14      15      141  
 ← برابر



9 → 4

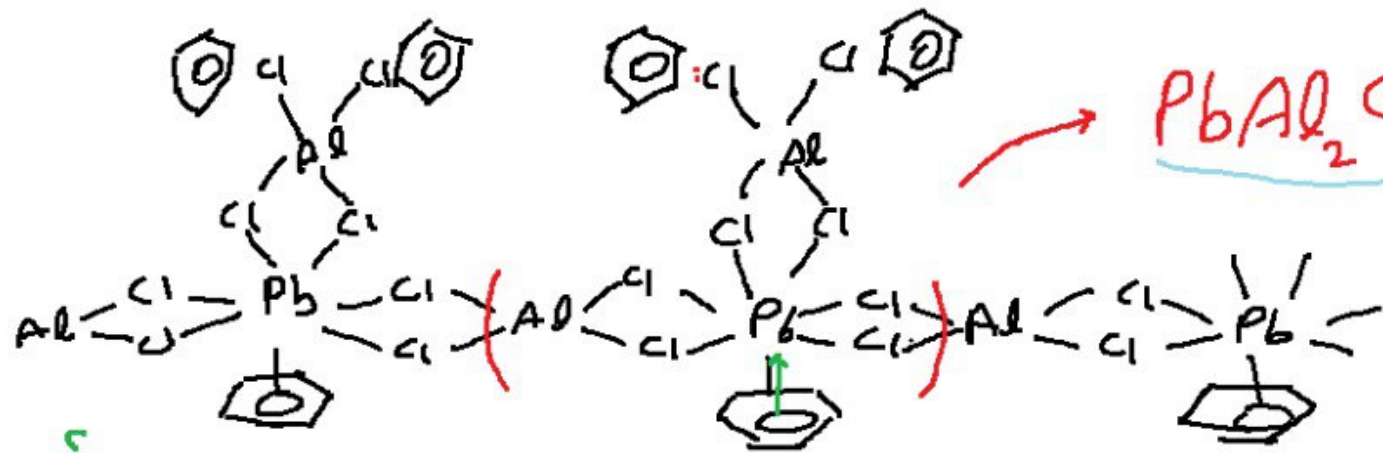


انز → 10





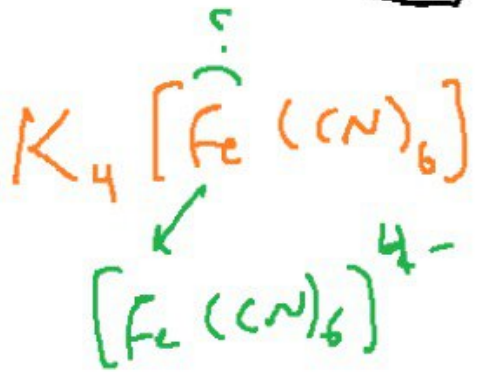
11 →



$$x + 2(+3) + 8(-1) = 0$$

$$= 0 \Rightarrow$$

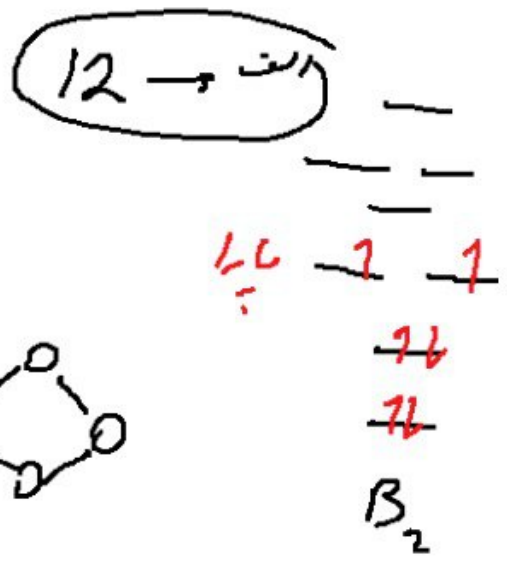
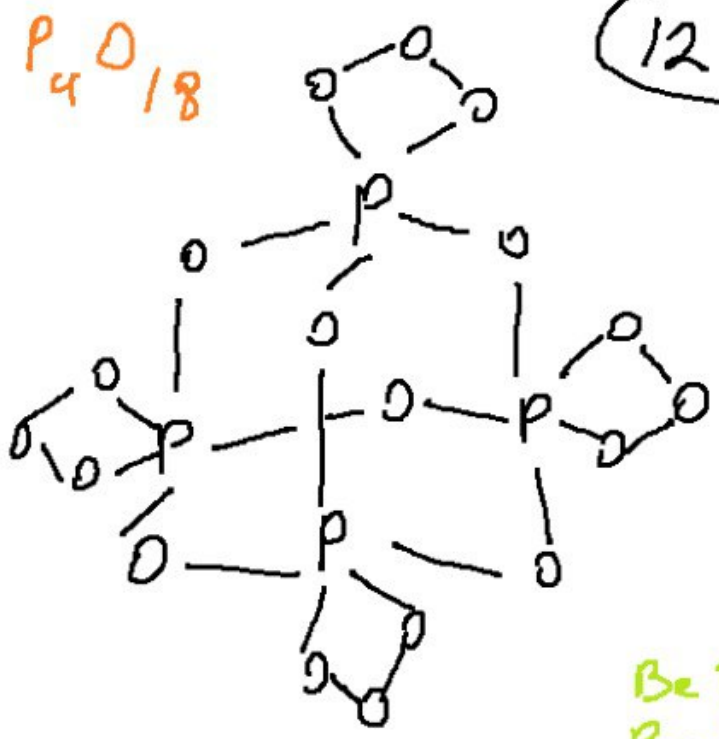
$$x = +2$$



$M \leftarrow :L$       لیگنڈ

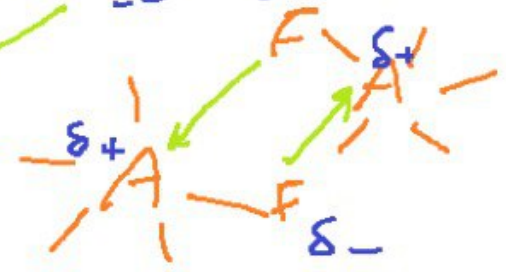
$$CN^- : 6(-1) + x = -4$$

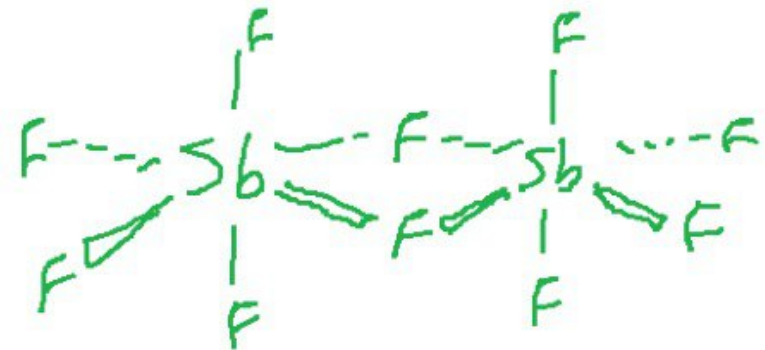
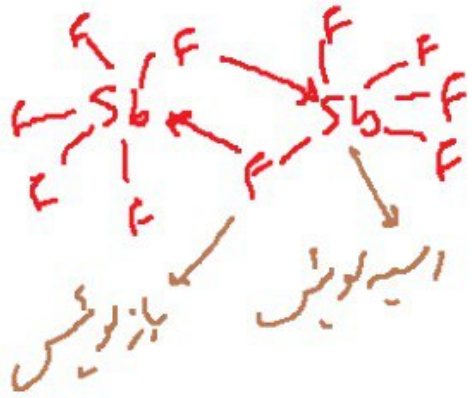
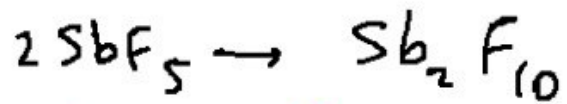
$$x = +2$$



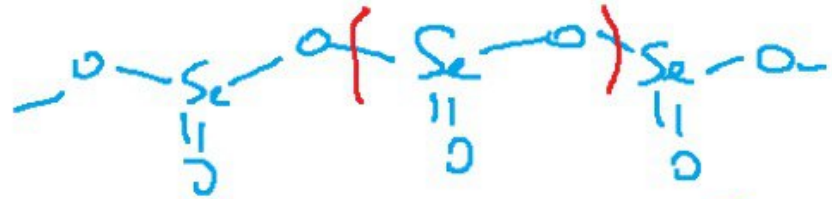
جایگزین کردن آلانسی  
 $Be F_2$   
 $Be H_2$

13  $\rightarrow$  نکته: اگر در مولکولی اتم مرکزی بزرگ  
 تنه در سوم به بعد با بار مثبت زیاد داریم کن  
 جانسی با بار تنه داشته باشیم احتمال ایجاد  
 ساختاری دیگر میسر می شود ... و غیره یاد است





13 → 2



CN → عدد کو تعداد دینا پس منج

