

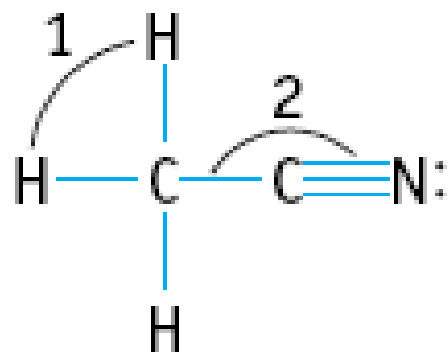
**Indicare il valore approssimato per i seguenti angoli:**

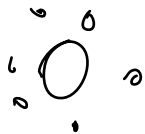
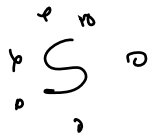
(a)  $\text{O} - \text{S} - \text{O}$  in  $\text{SO}_2$

(b)  $\text{F} - \text{B} - \text{F}$  angle in  $\text{BF}_3$

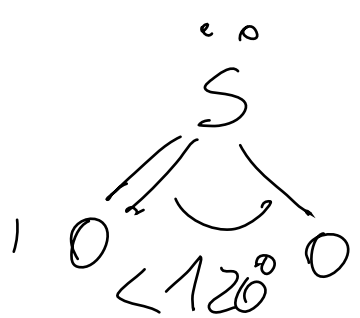
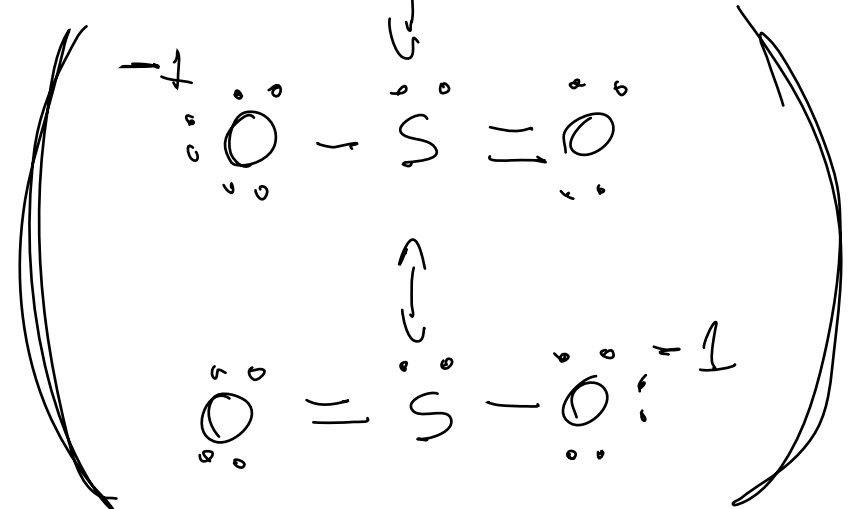
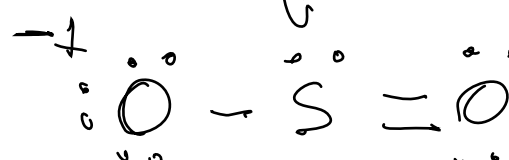
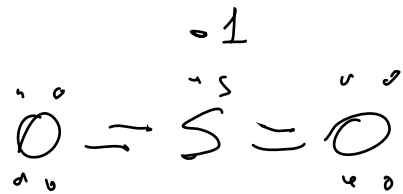
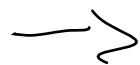
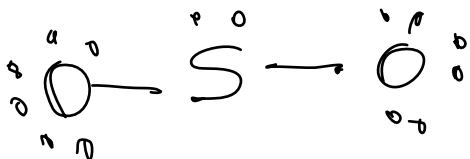
(c)  $\text{Cl} - \text{C} - \text{Cl}$  angle in  $\text{Cl}_2\text{CO}$

(c)  $\text{H} - \text{C} - \text{H}$  (angle 1) and  $\text{C} - \text{C} \equiv \text{N}$  (angle 2) in acetonitrile



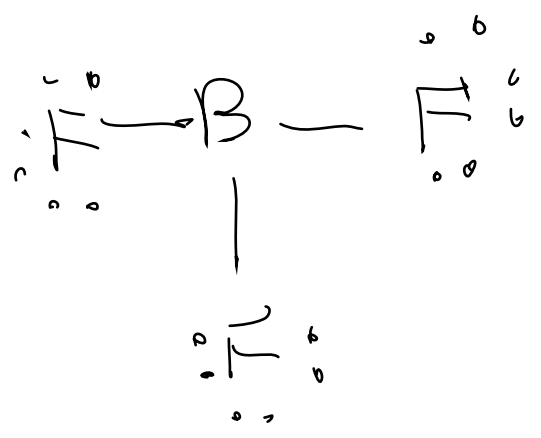
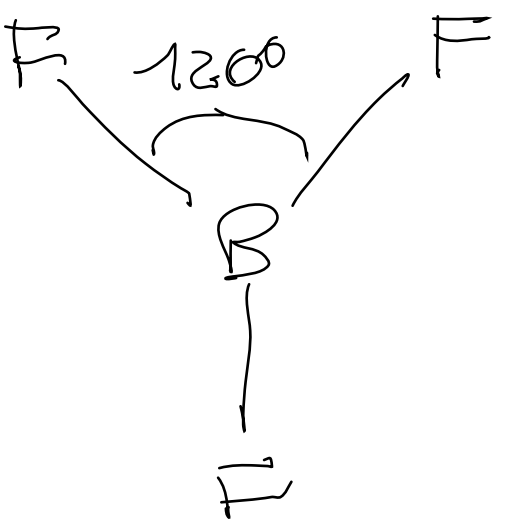


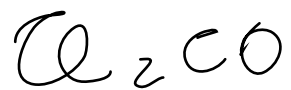
$$6 \cdot 3 = 18 \text{ (9)}$$



21

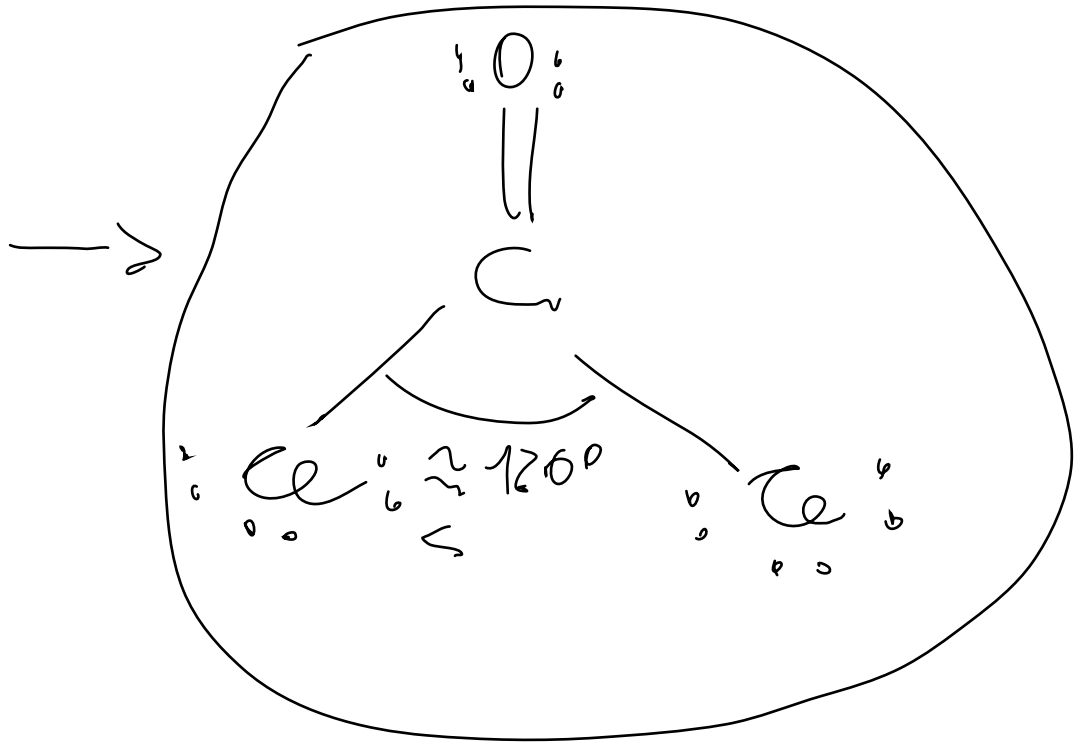
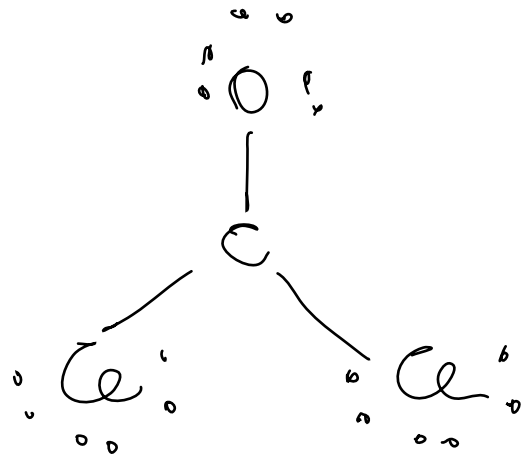
$$7 \cdot 3 + 3 = 24$$

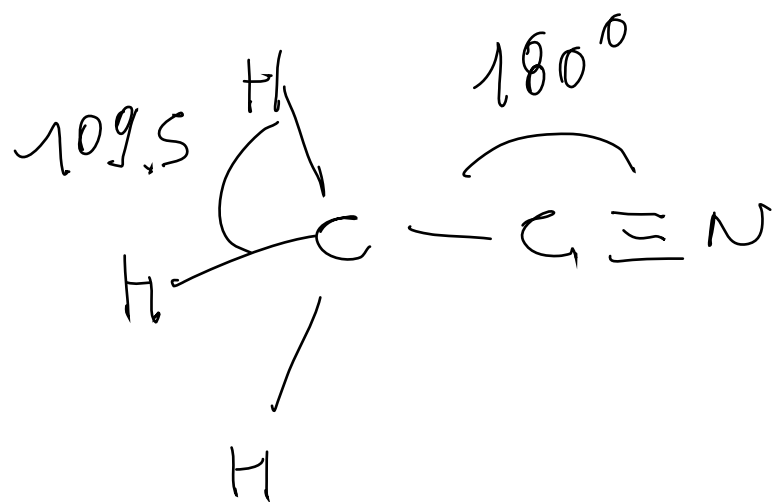




$6 + 4 + 14 = 24$

10

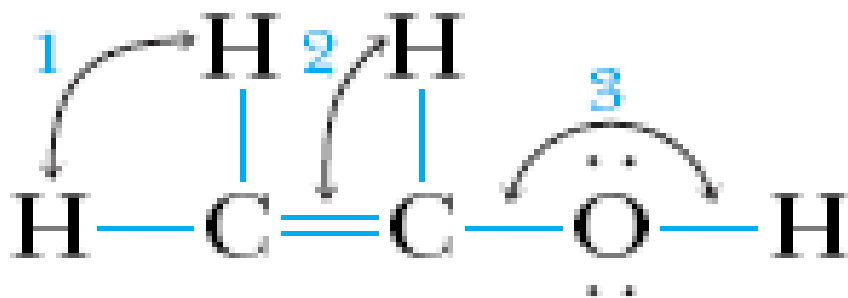




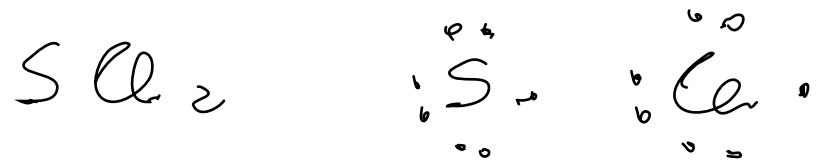
Indicare il valore approssimato per i seguenti angoli:



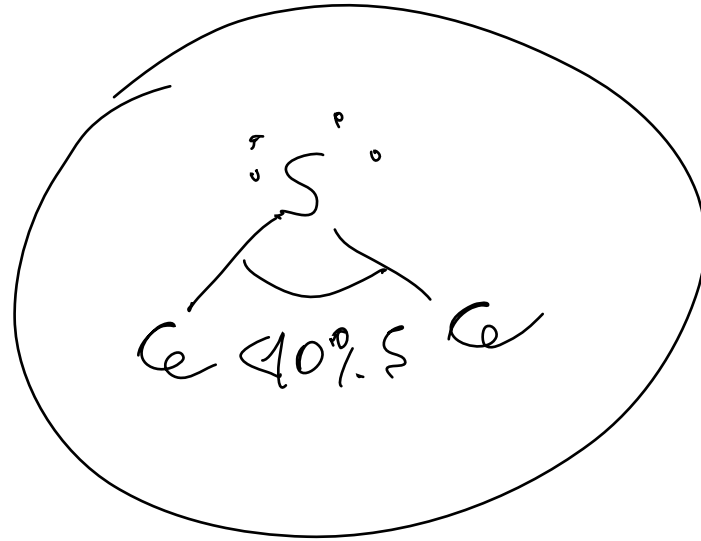
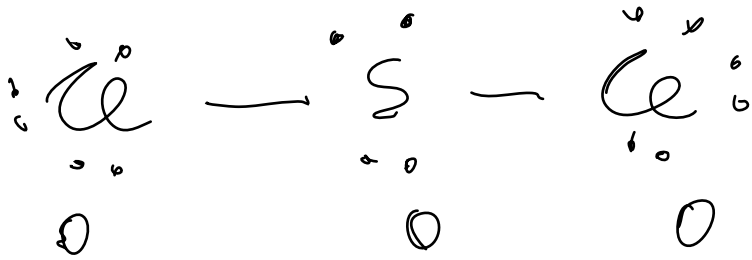
(c)

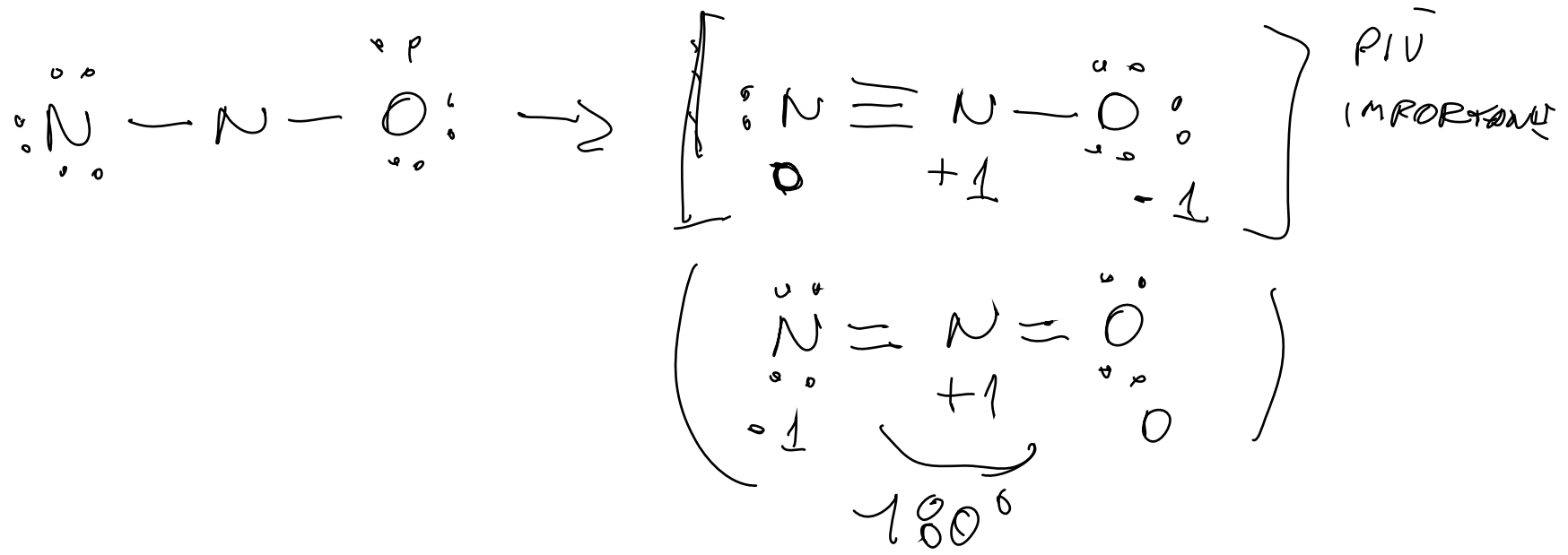
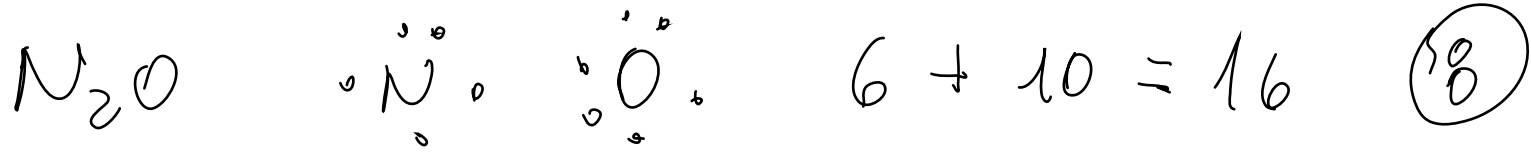


Alcool VINILICO

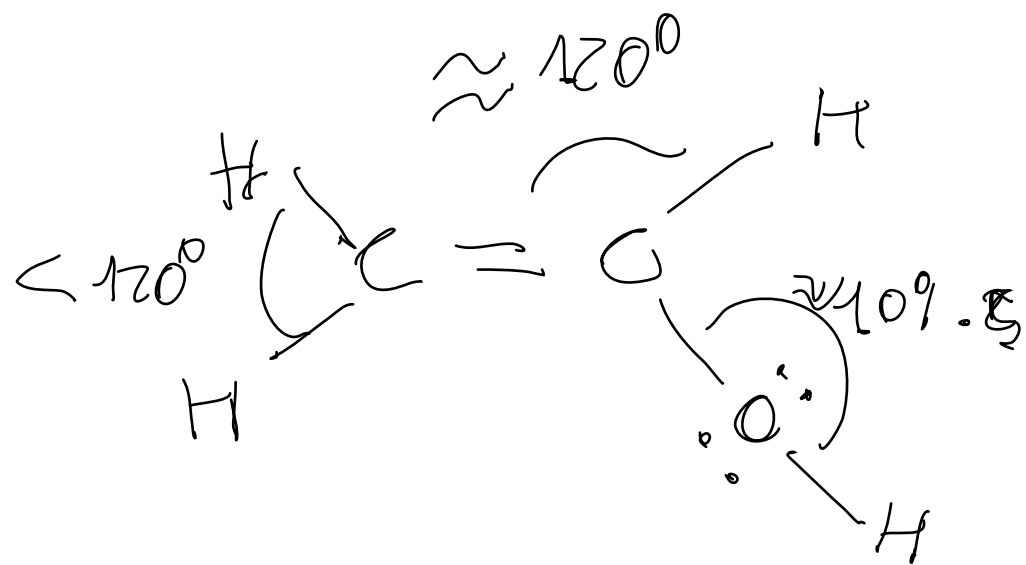


$7 - 2 + 6 = 20$       $(10)$









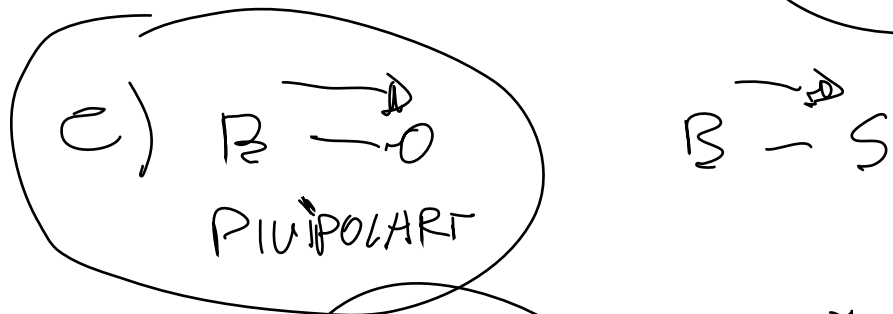
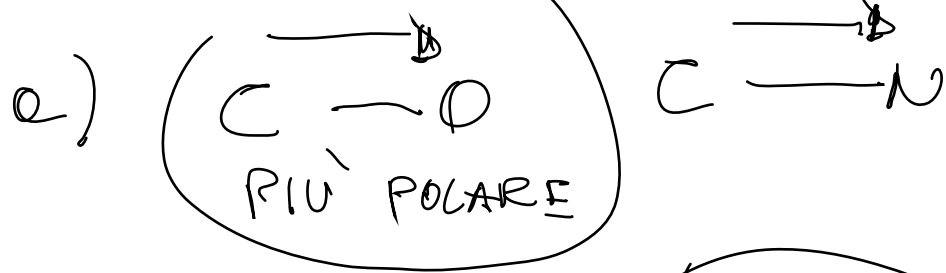
**Imdividuare i legami piu' polari ed indicate con un freccia il momento di dipolo:**

(a) C — O and C — N

(c) B — O and B — S

(b) P — Br and P — Cl

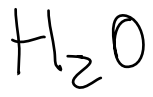
(d) B — F and B — I



**Considerare le seguenti molecole ed indicare:**

- I) quale composto ha i legami piu' polari**
- II) quale e' non polare**
- III) Quale atomo in ClF e' carico piu' negativamente ?**

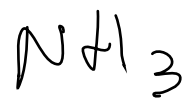




polare



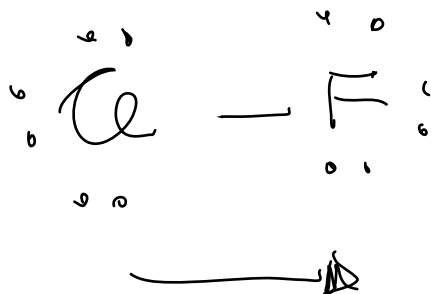
non polare



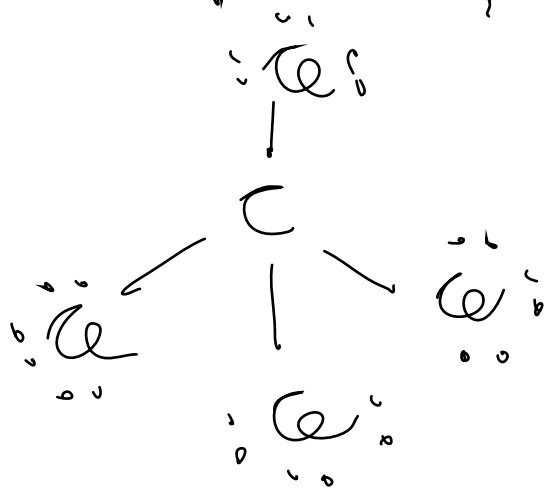
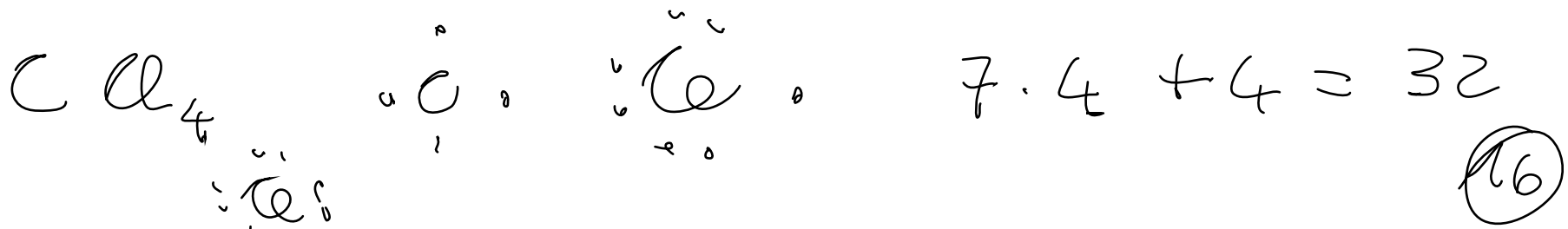
POLARE



$$7 \cdot 2 = 14$$



POLARE



NON POLARE







**Lo ione cianato  $\text{OCN}^-$  ha l'atomo meno elettronegativo il C al centro. Lo ione fulminato molto poco stabile  $\text{CNO}^-$  ha la stessa formula ma e' l'atomo di N ha trovarsi al centro.**

**a) disegnare le tre possibili formule di risonanza del  $\text{CNO}^-$**

**b) quale e' la struttura di risonanza piu' stabile**

**c) il fulminato di mercurio  $\text{Hg}(\text{CNO})_2$  è principalmente**

**usato nella produzione di detonatori per esplosivi e di inneschi per cartuccia. Perche' e' cosi' instabile ?**

CIAWATO  $0 \in N$

$$\begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix}$$

$$5+4+6+1=16$$

(8)

$$\begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix}$$

$$\left[ \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \right] = \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix}$$

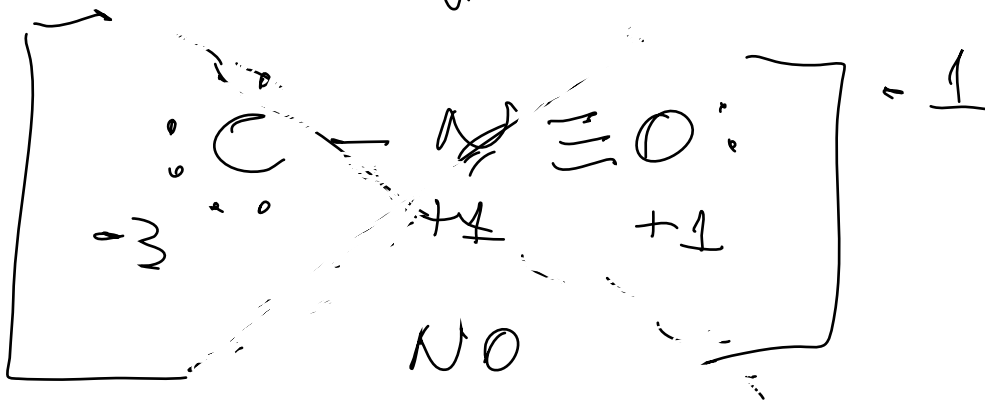
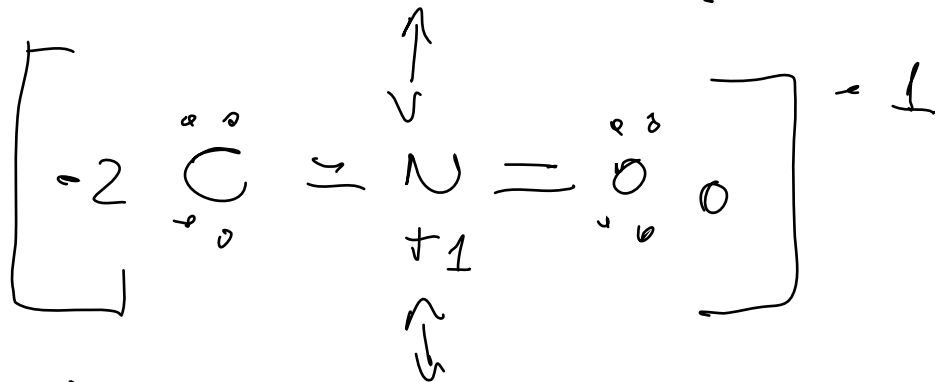
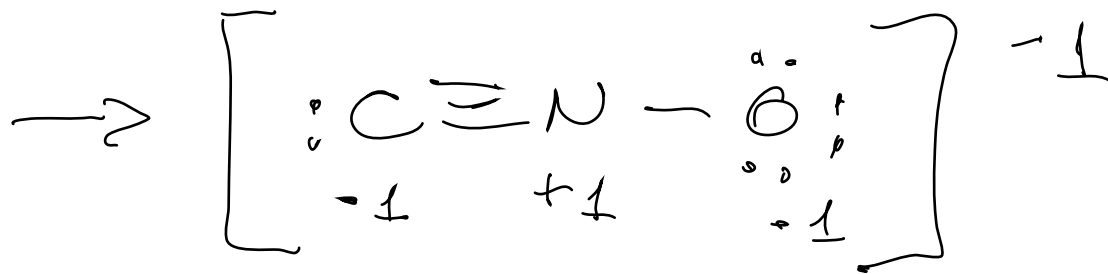
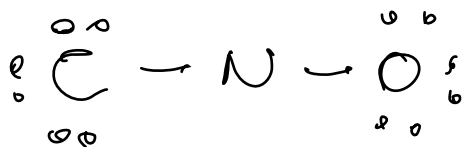
$$\left[ \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \right] - \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \equiv \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix}$$

~~$$\left[ \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \right] = \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix} \quad \begin{matrix} & 0 & \\ 0 & & \\ & 0 & \end{matrix}$$~~

FULMINATO



4 + 5 + 6 + 1 = 16 (8)



STABILITÀ  
DESCRESCE