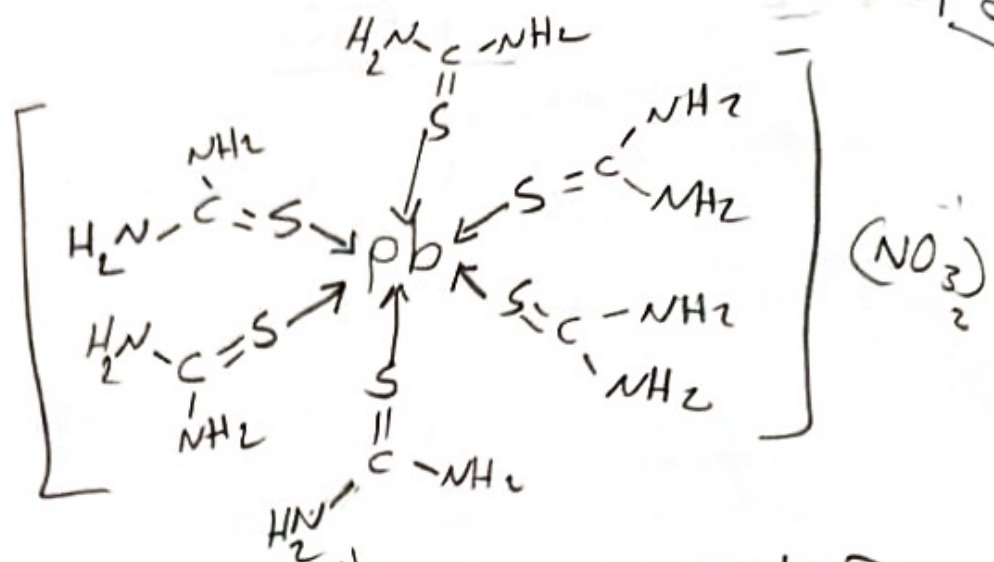


وبعد يكون سراسر شاق كافي مفعول وتأكسدة

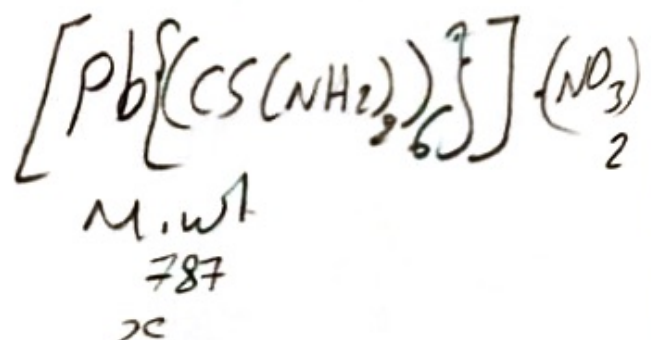
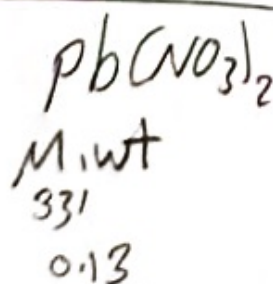


(3) Counter ions $\Rightarrow (\text{NO}_3)_2 \Rightarrow$ هذا يعني
 2 جاذبة لذرة مركزية Pb أو $+2$ NO_3

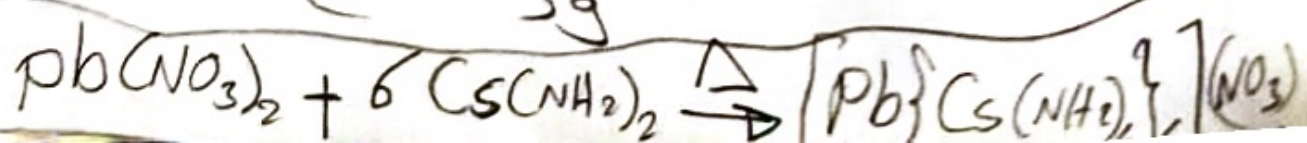
Procedure

- (1) Dissolve (0.13g) of $\text{Pb}(\text{NO}_3)_2$ lead Nitrate in 3ml of distilled water in a beaker
- (2) Dissolve 0.33g of thiourea in (5ml) of distilled water
- (3) Mix the two solutions in one beaker and then cool the mixture with ice bath, then filter the mixture
- (4) Dry the crystals & then calculate the Theoretical Mass & the Percentage of complex

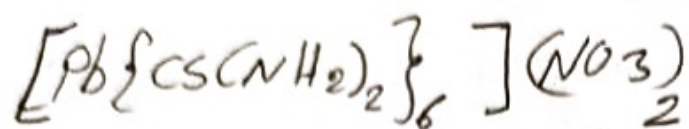
Calculation



$x = (\quad) \text{g}$



Preparation of Hexathiourea Lead (II) Nitrate



The type of Salt $\rightarrow$ Sample Salt $\Rightarrow$ MCl
 $\rightarrow$ Double Salt $\Rightarrow$ Alum
 $\rightarrow$ Complex Salt

The complex Salt contains :-

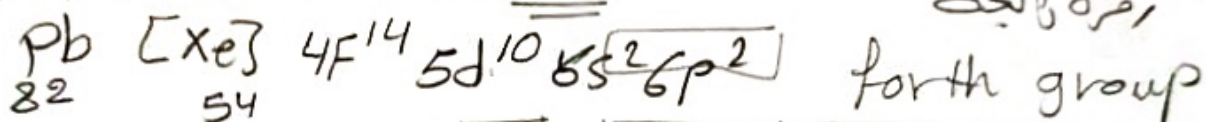
1- Central atom الذرة المركزية

2- Ligand $\Rightarrow$ Coordination number

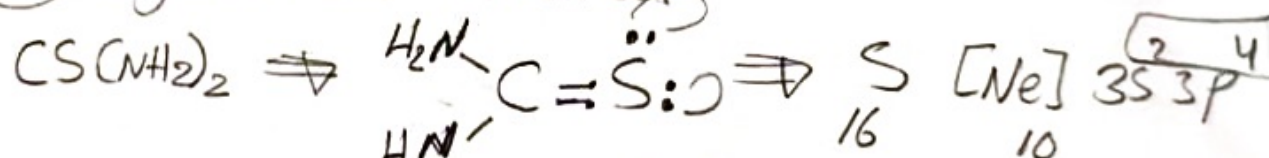
The number of groups which gives the geometric shapes to the complex

3- The Counter ions الأيونات
 which Equivalent the charge of the Central atom.
 يعادل اذى كافى شحنة

① Central atom is Pb



② Ligands $\Rightarrow$ Thiourea



Thiourea $\hookrightarrow sp^3$ $\Rightarrow$ التساق يكون من ذرة S
 الفقية بالترتبات

وبذلك فان الارتباط يكون من S تساقياً مع لذرة مركزية
 التي كسوى اورتبات فائة

