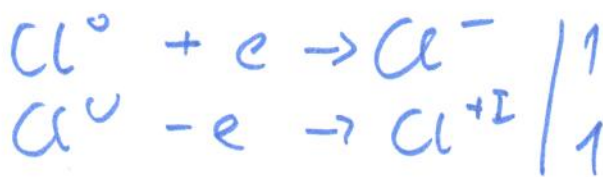
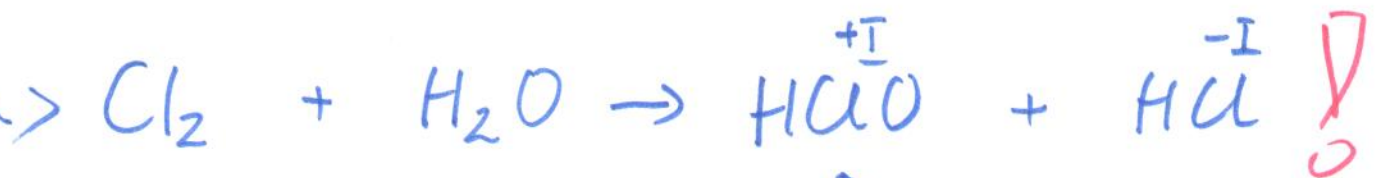


# WNoŻ Chemia ogólna 18 X 2018 Wykład 4



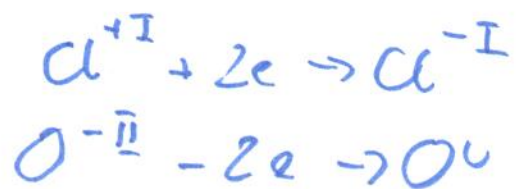
dysmutacja = dysproporcjonowanie



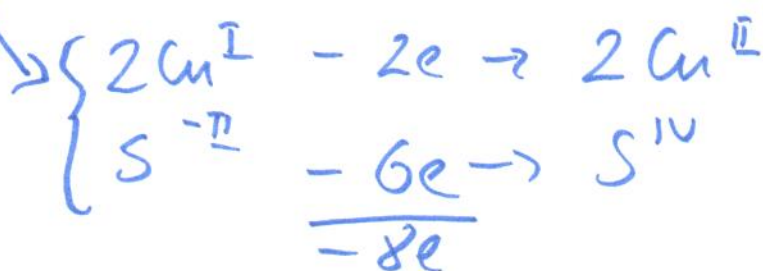
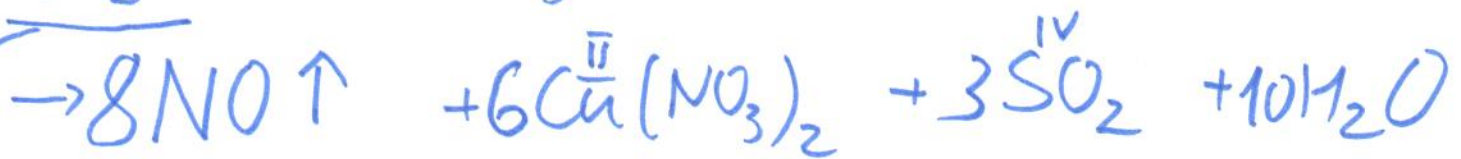
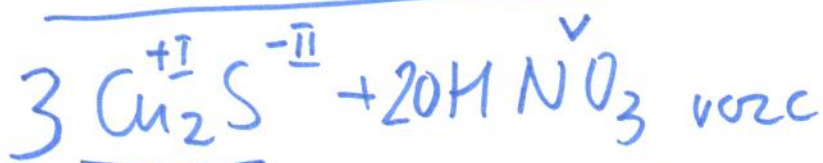
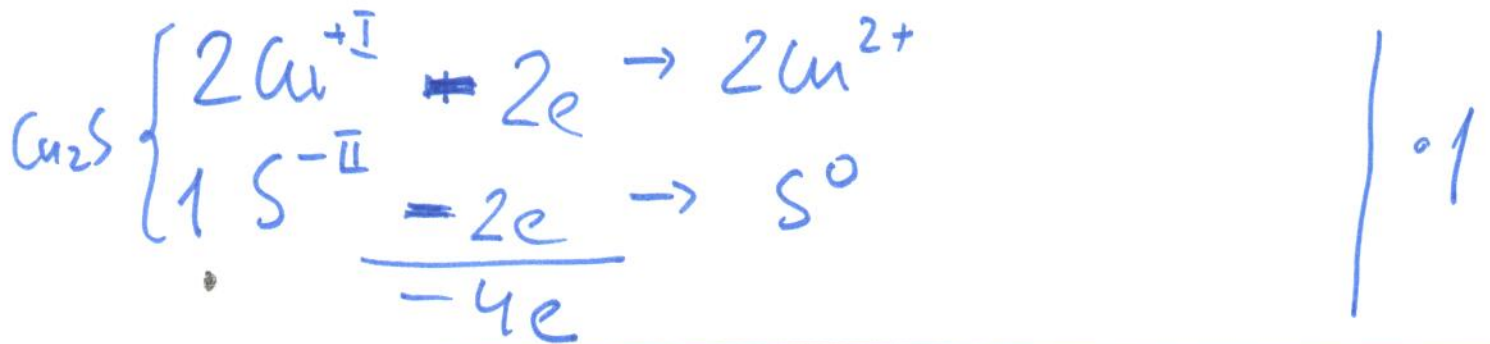
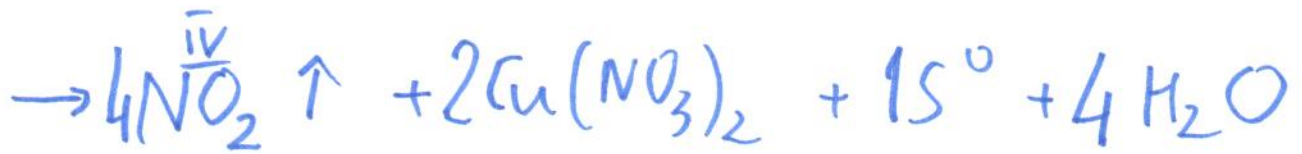
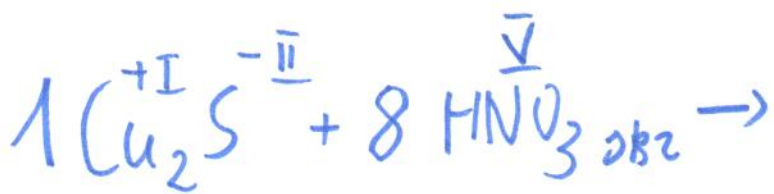
kwes chłorowy(I)  
podchloraowy



anion podchlorynowy



to nie dysmutacja

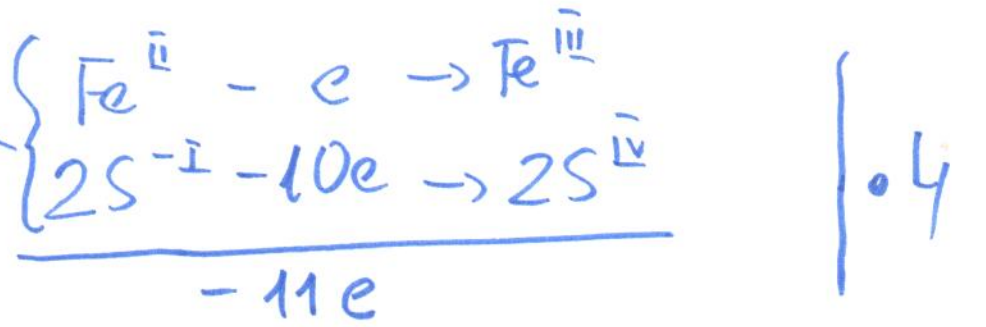
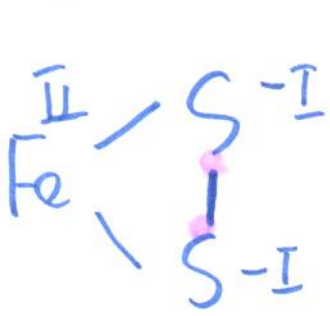
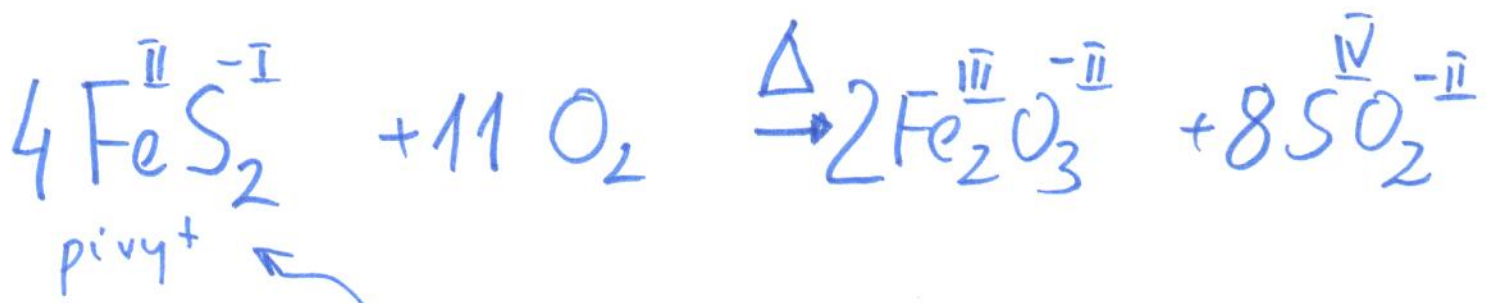


$$L = 60$$

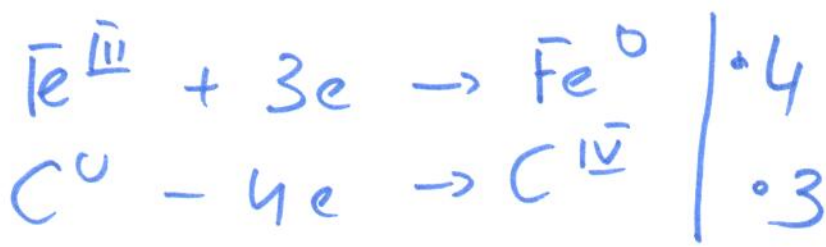
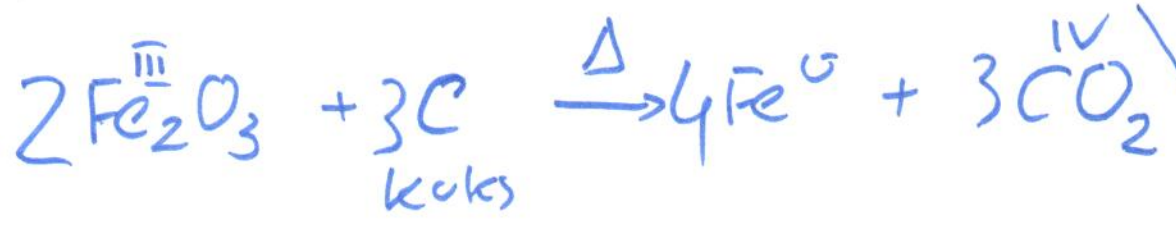
$$P = 8 + 36 + 6 + 10$$

$$= 60$$



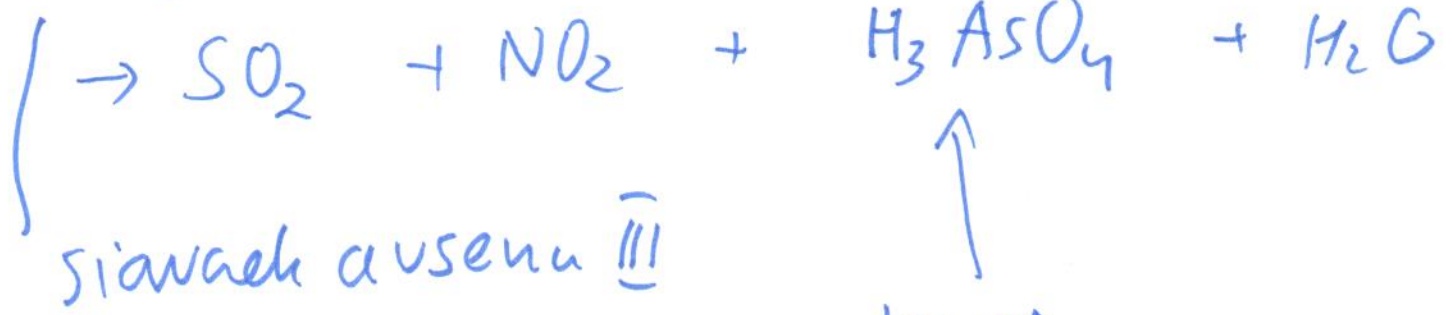
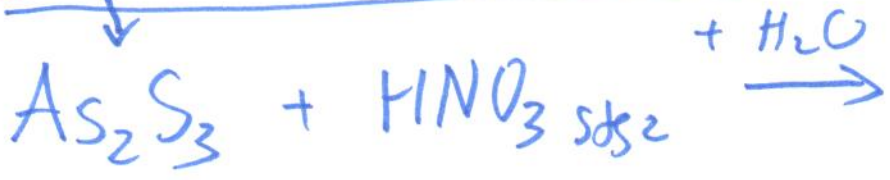


2 vedultany



- N  
P  
As  
Sb  
Bi

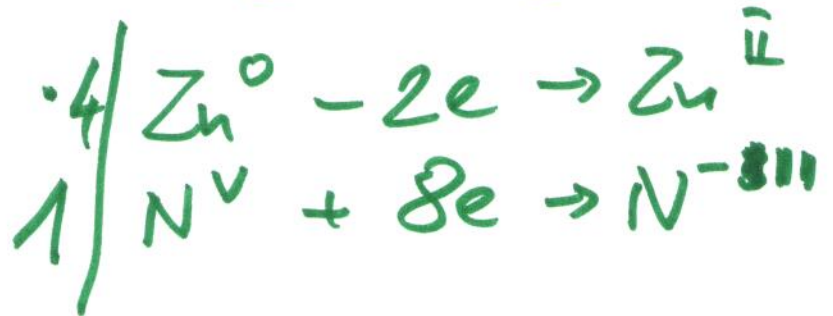
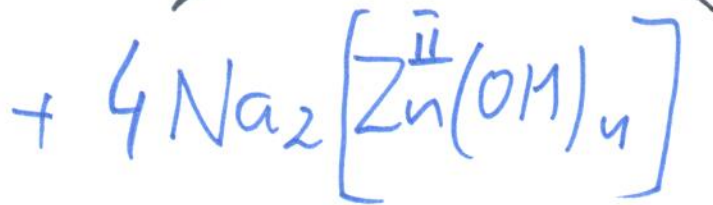
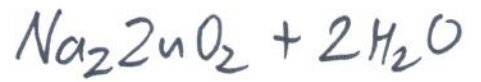
↑



siavach auseru III

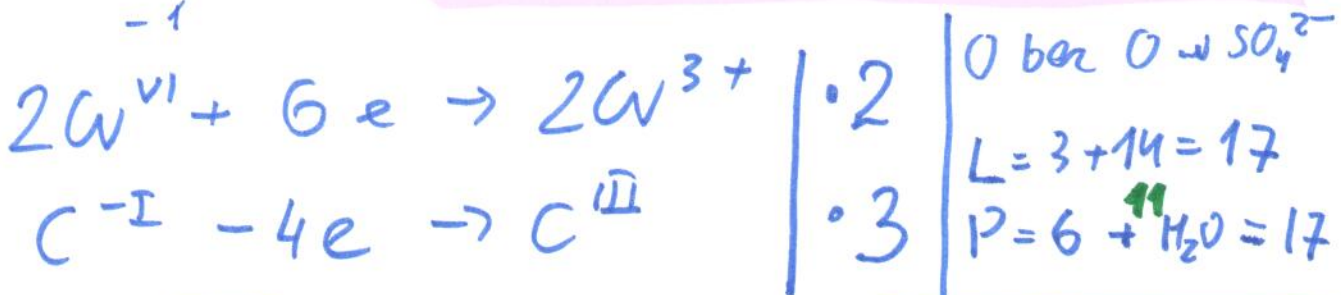
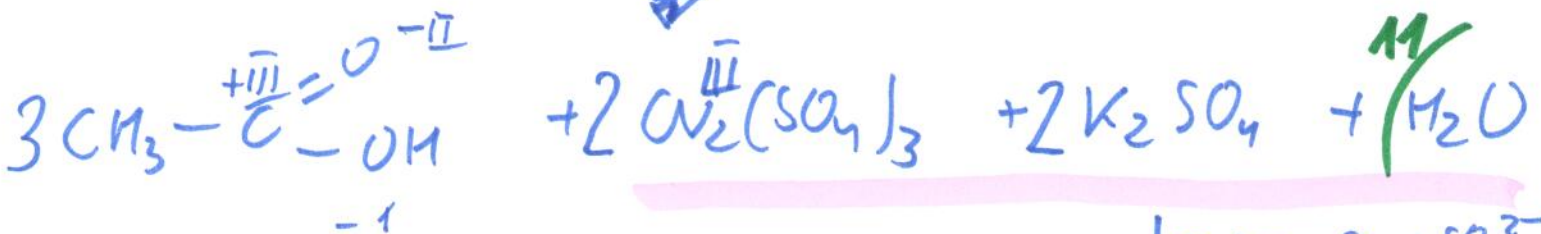
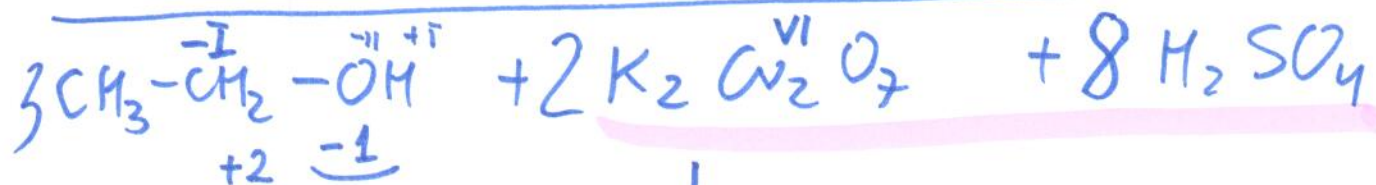
inves  
outoavsenung (V)

As<sub>2</sub>O<sub>3</sub> avsenik



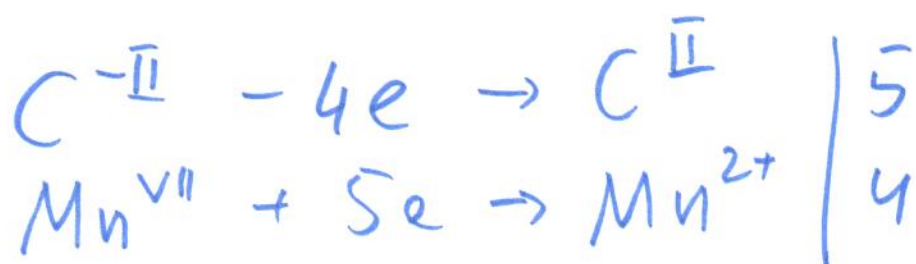
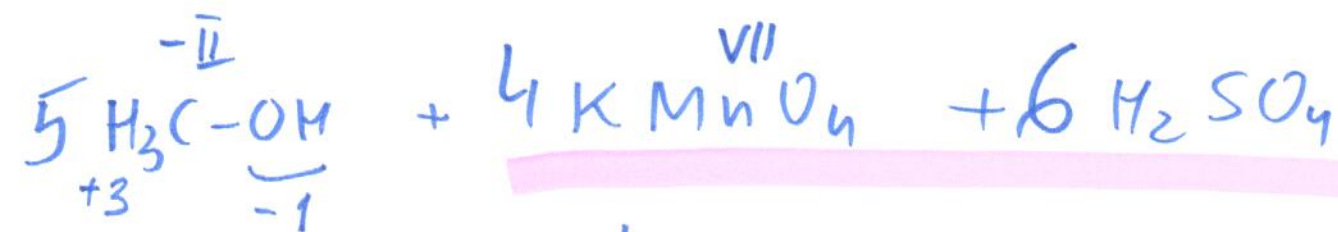
$$\begin{array}{l} \text{H} \quad \text{P} = 3 + 16 = 19 \\ \text{L} = 7 + 6\text{H}_2\text{O} = 19 \end{array}$$

$$\begin{array}{l} \text{O} \quad \text{L} = 3 + 7 + 6 = 16 \\ \text{P} = 4 \cdot 4 = 16 \end{array}$$



$$\pm 12e$$

$$\begin{array}{l} \text{H} \quad \text{L} = 18 + 16 = 34 \\ \text{P} = 12 + 22 = 34 \end{array}$$



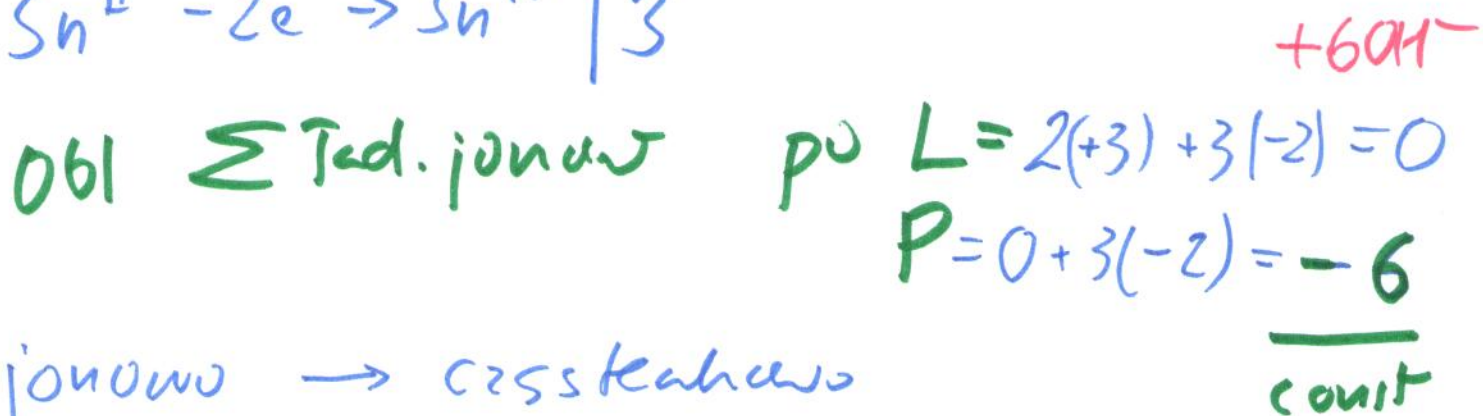
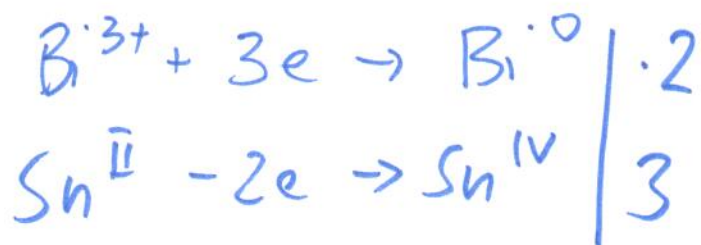
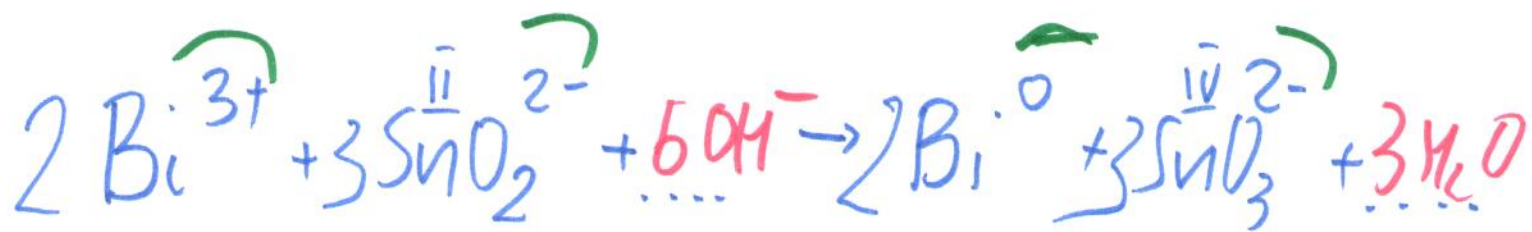
$$\text{H} \quad L = 20 + 12 = 32$$

$$P = 10 + 11 \text{H}_2\text{O} = 32$$



$$L = 5 + 16 = 21$$

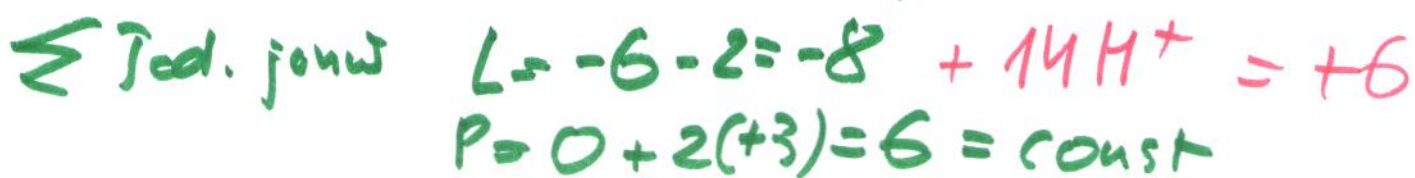
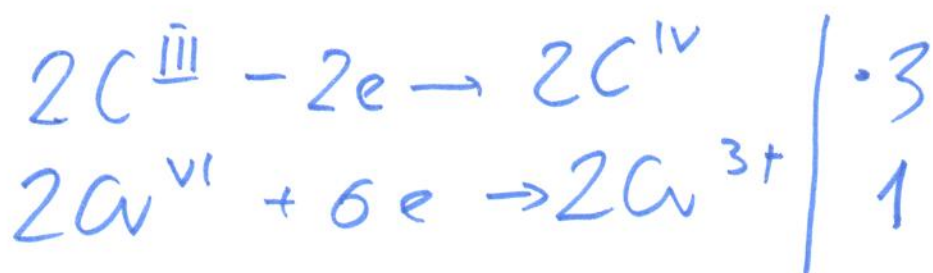
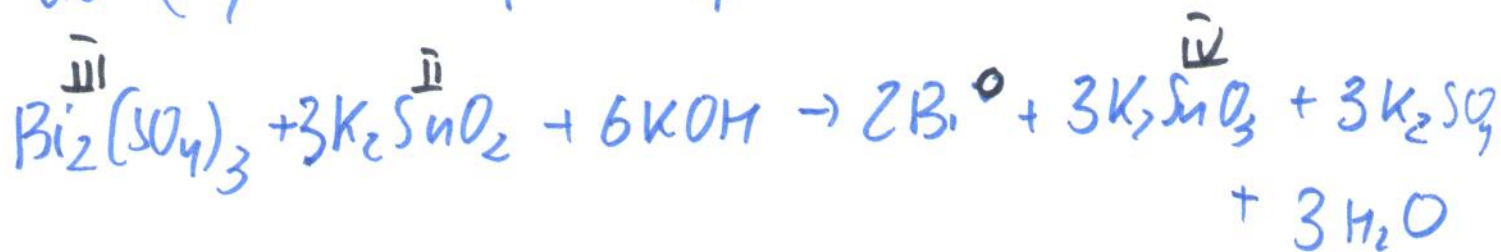
$$P = 10 + 11 = 21$$



jonowo  $\rightarrow$  czyszczenie

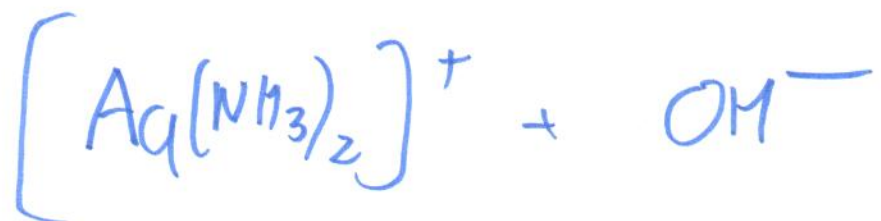
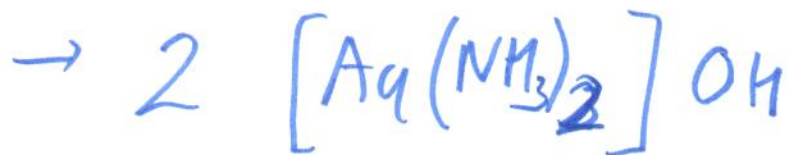
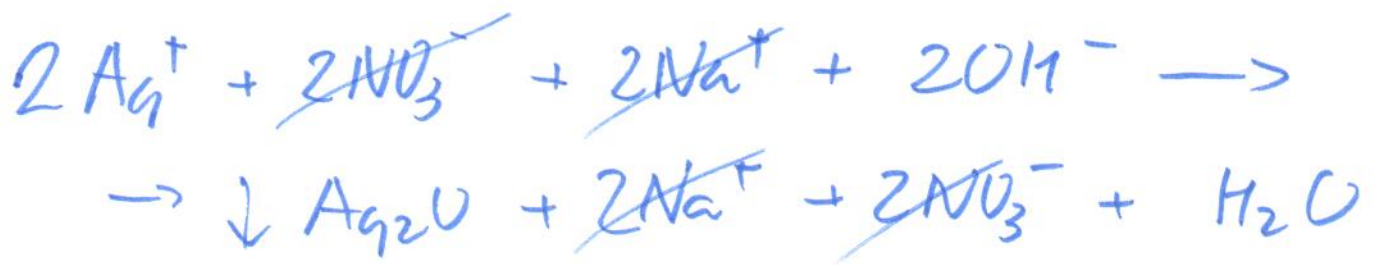
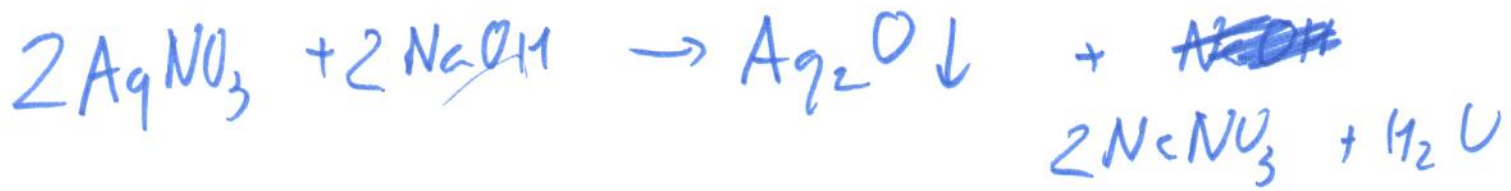
do (-) dodaj  $\text{K}^+$  (lub  $\text{Na}^+$ )

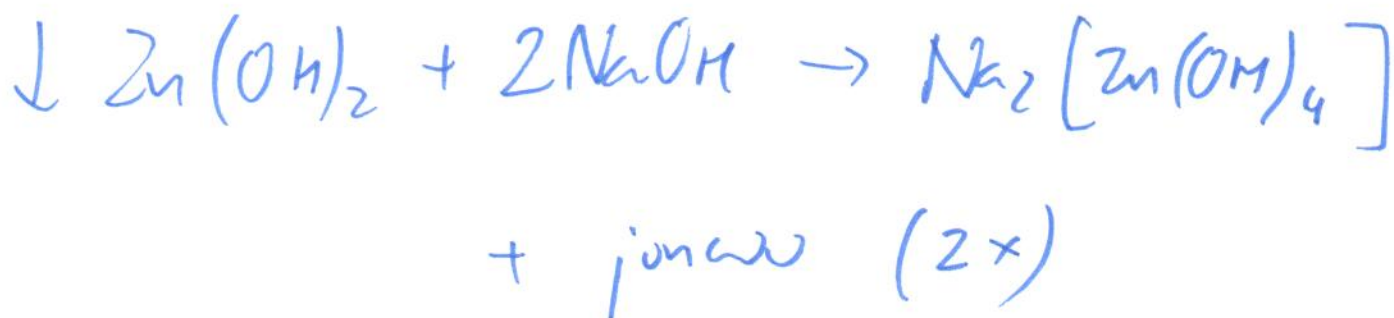
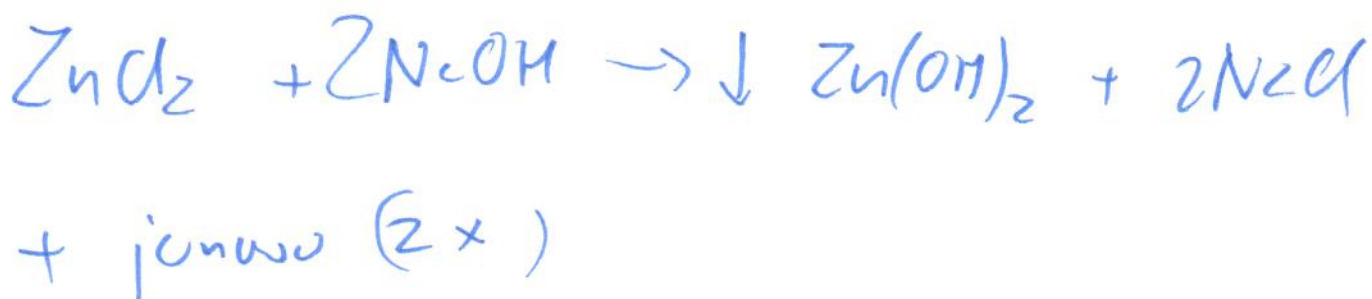
do (+) dodaj  $\text{SO}_4^{2-}$



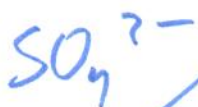
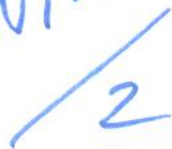
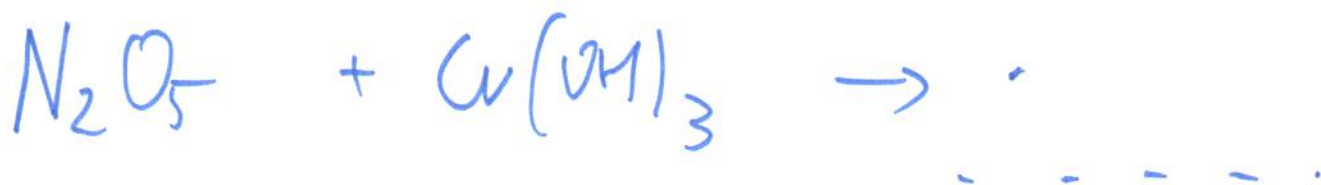
I voll.

20 reakcji (ben barw osadów)





2 przykładowo:



+ jonany

+ hydraktyzacja soli