

Открытая региональная межвузовская олимпиада вузов Томской области (ОРМО)

Общий балл	Дата	Ф.И.О. членов жюри	Подписи членов жюри
46,5	21.03	Семёнов	

1

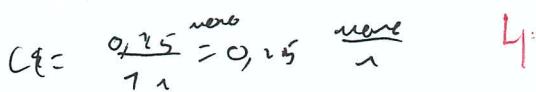
1) Pb - свинец

 $(\text{Cn}_3\text{COO})_2\text{Pb}$ - ацетат свинца.

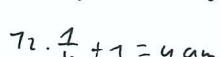
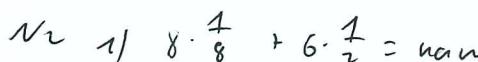
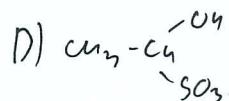
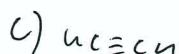
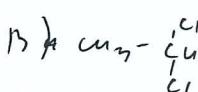
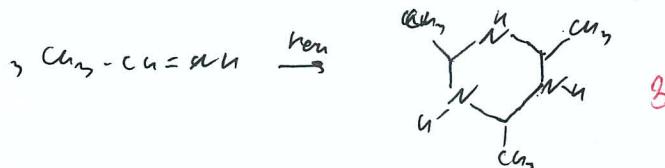
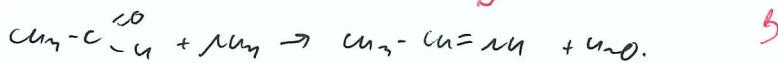
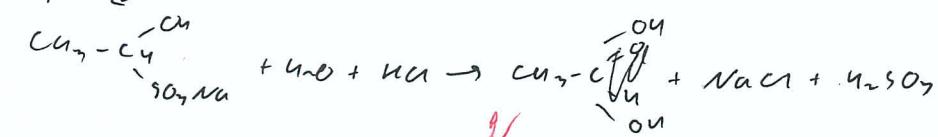
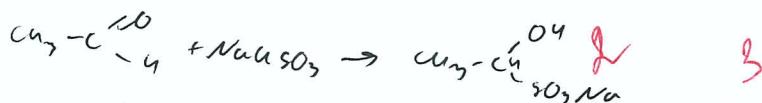
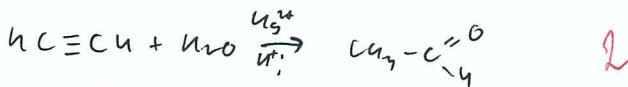
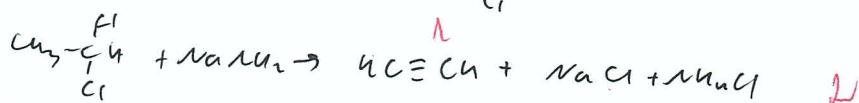
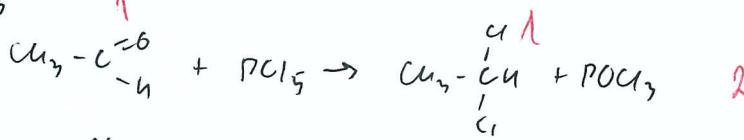
1	2	3	4
18	5	25	13

 PbO_2 - оксид свинца II Pb_2O_3 - смешанный оксид свинца = $\text{PbO} \cdot \text{Pb}_2$ 0,5 PbCl_2 - хлорид свинца II PbO - оксид свинца II Ca_2PbO_4 - ~~из исходных~~ природный оксид свинца. X_2 - $\text{Pb}(\text{NO}_3)_2$ - нитрат свинца II X_1 - Na_2PbO_2 - гидрат нитрата. $\text{Pb}_3(\text{O}_4\text{O}_6)_2$ - флюорид непротонированного свинца III2) 1. $\text{Pb} + 2\text{Cn}_3\text{COO} \rightarrow (\text{Cn}_3\text{COO})_2\text{Pb} + \text{H}_2\uparrow$ 2. ~~1~~ $2\text{PbO}_2 + 4\text{HNO}_3 \rightarrow 2\text{Pb}(\text{NO}_3)_2 + 2\text{H}_2\text{O} + 2\text{NO}$ 3. ~~1~~ $\text{PbO} + 2\text{NaOH} \rightarrow \text{Na}_2\text{PbO}_2 + \text{H}_2\text{O}$ 4. $\text{PbO} + \text{Cn}_3\text{COO} \rightarrow (\text{Cn}_3\text{COO})_2\text{Pb} + \text{H}_2\text{O}$ 5. $\text{PbO} + 2\text{NaOH} \rightarrow \text{Na}_2\text{PbO}_2 + \text{H}_2\text{O}$ 6. $\text{Pb}_3\text{O}_8 + \text{O}_2 \rightarrow 3\text{PbO}$ 7. $3\text{PbO} + \text{H}_2\text{O}_2 + \text{CO}_2 \rightarrow \text{Pb}_3(\text{O}_4\text{O}_6)_2$ 8. $\text{PbO}_2 + \text{CH}_3\text{Cl} \rightarrow \text{PbCl}_2 + \text{CO}_2 + \text{H}_2\text{O}$ 9. $2\text{PbO} + \text{Cn}_3\text{COO} + \text{O}_2 \rightarrow 2\text{Cn}_3\text{PbO}_2 + \text{H}_2\text{O}$ 4) $\text{Pb} + 2\text{Cn}_3\text{COO} \rightarrow (\text{Cn}_3\text{COO})_2\text{Pb} + \text{H}_2\uparrow$ $n(\text{Pb}) = 0,25$ моль $n(\text{Cn}_3\text{COO}) = 1$ моль $n((\text{Cn}_3\text{COO})_2\text{Pb}) = 0,25$ моль

$$C = \frac{m}{V}$$

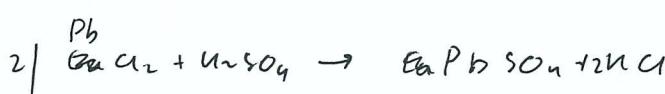


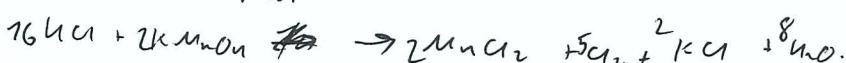
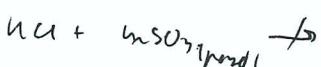
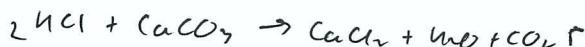
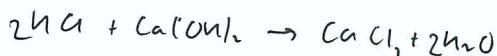
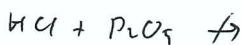
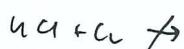
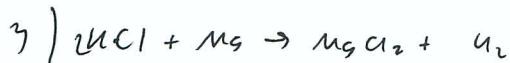
№3



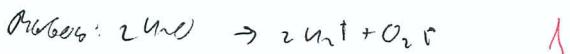
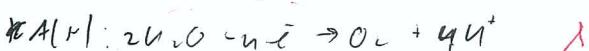
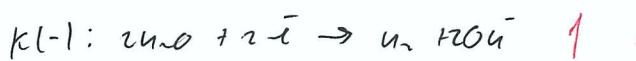
1:1 предположено $x - \text{NaCl}$.

✓





Ну



$$E = E^\circ - \frac{RT}{nf} \ln \frac{C_i}{C_0}$$