

№1

Дано:

$$m(\text{сұмса}) = 22,80$$

$$V(\text{газ}) = 24,64 \text{ л}$$

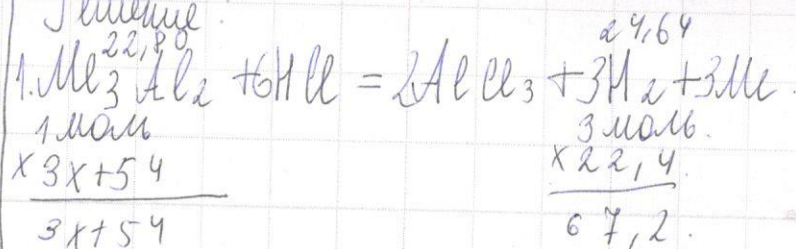
$$w(\text{p-p KOH}) = 25\%$$

$$\rho(\text{p-p}) = 1,185 \text{ г/мл}$$

$$1. \text{Me} - ?, w - ?$$

$$2. w(\text{Me}) - ?$$

Решение:



$$\frac{22,80}{3x + 54} = \frac{24,64}{67,2}$$

$$22,80 \cdot 67,2 = 24,64(3x + 54)$$

$$1532,16 = 73,92x + 1330,56$$

$$1532,16 - 1330,56 = 73,92x$$

$$201,6 = 73,92x$$

$$201,6 = 73,92x$$

$$\frac{201,6}{73,92} = x$$

$$2,7 = x$$

$$w = \frac{Ar(\text{Me})}{Mr(\text{Me}_3\text{Al}_2)} \cdot 100\% = \frac{2,7 \cdot 3}{62,1} \cdot 100\% \approx 13\%$$

2. Дано:

$$\rho = 1,185 \text{ г/мл}$$

$$w(\text{p-p KOH}) = 25\%$$

$$V - ?$$

Решение:

$$m = \rho V$$

№2

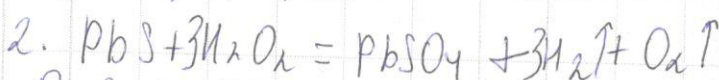
Дано:

$$w(\text{X}) = 86,62\%$$

Решение:



$$2. w(\text{PbS}) = \frac{Ar(\text{Pb})}{Mr(\text{PbS})} \cdot 100\% = \frac{207}{239} \cdot 100\% = 86,62\%$$

Ответ:  $\text{PbSO}_4$ 

$$3. C = \frac{n}{V}$$

$$n = m \cdot M = 0,0032 \cdot 303 \approx 1$$

$$M(\text{PbSO}_4) = 207 + 32 + 64 = 303$$

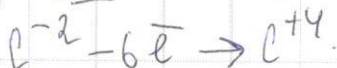
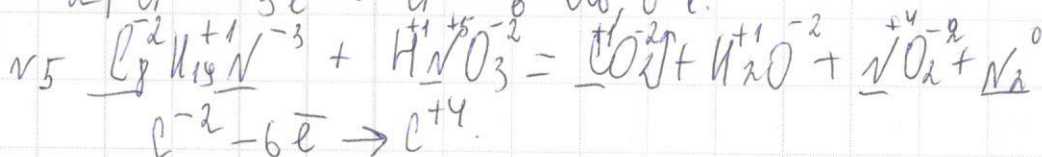
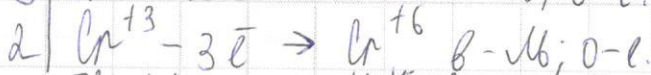
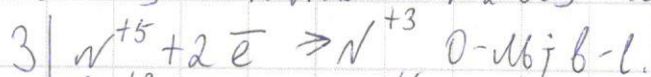
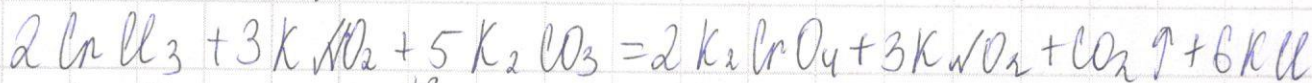
Парақтың артқы жағын толтырмаңыз / Обратную сторону листа не заполнять

$$V = \rho m = 0,0032 \cdot 1 = 0,0032$$

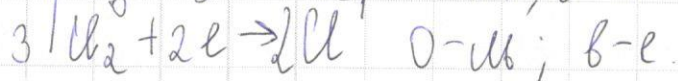
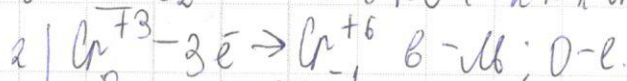
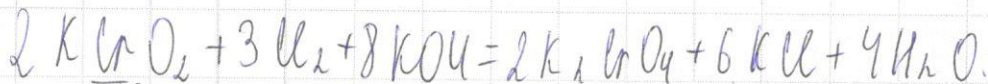
$$c = \frac{1}{0,0032} = 0,0032 \text{ моль/л}$$

4 -

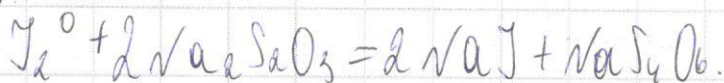
Задача 3. n4



n3



n1



Задача 4.

1. Дано:

$$m(\text{H}_2\text{O}) = 100 \text{ г}.$$

$$M_1(\text{MgCl}_2) = 65,82, t = 80^\circ \text{C}.$$

$$M_2(\text{MgCl}_2) = 54,82, t = 20^\circ \text{C}$$

$$m(\text{MgCl}_2) = ?$$



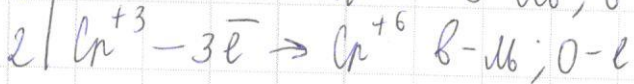
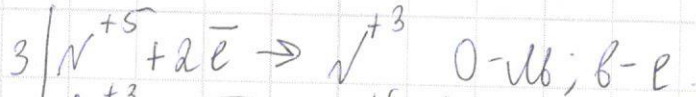
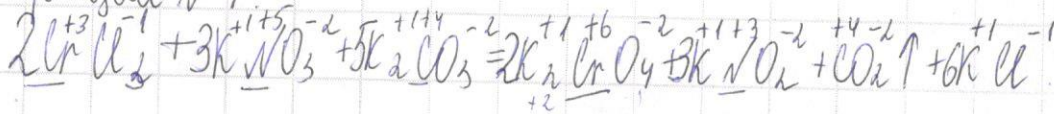
$$V = \frac{m}{\rho} = 0,0032 : 1 = 0,0032$$

$$C = \frac{1}{0,0032} = 0,0032 \text{ моль/л.}$$

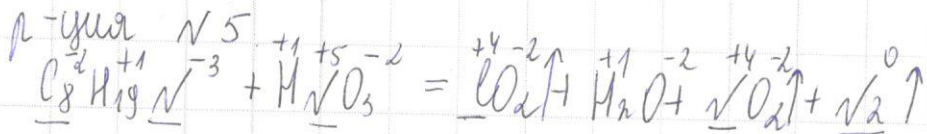
4. -

№9

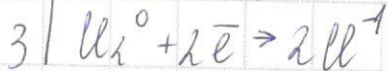
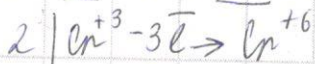
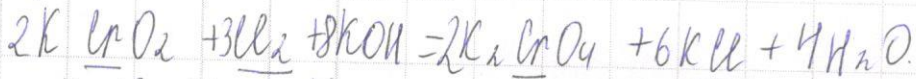
р-ция №4



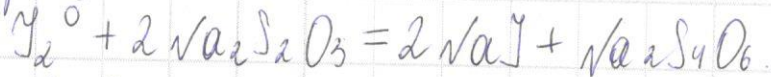
р-ция №5



р-ция №3



р-ция №1



Задача №4

1. Дано:

$$m(\text{H}_2\text{O}) = 100 \text{ г}$$

$$\rho_{\text{мб}}(\text{MgCl}_2) = 65,84 \text{ г/см}^3, t = 20^\circ\text{C}$$

$$\rho_{\text{мб}}(\text{MgCl}_2) = 54,8 \text{ г/см}^3, t = 20^\circ\text{C}$$

$$m(\text{MgH}_2\text{Cl}) = ?$$