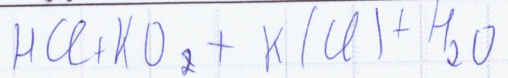


1. Берілемі:

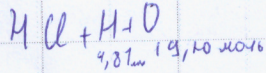
$$\rho = 1,185 \text{ г/мл}$$



$$m = 272 \quad m = V \cdot \rho$$

Т/к: (Me (II) - x-?)

Cl - VII топ элементі, қоспаған;



тұз тұзды, өткір иісі, ұсақ.

$$V = 4,811 \text{ л (20}^\circ\text{C, 1 атм)}$$

$$A_r(\text{Cl}) = 35,5$$

13 есе азайды

$$O_m = 19,202$$

$$A_r(\text{Cl}) = 35,5$$



$$A_r(\text{H}) = 1$$

$$\text{COOH} = 25\%$$

2-есеп.

Берілемі:



$\text{CO}_2$  газы арзан. Сауға болады

$$M_r(x) = 20,2\%$$

$\text{S}_2\text{B}$  ерітіндісі - Бұл ерітіндіде  $\text{B}_n\text{H}_2\text{O}$  формуласы

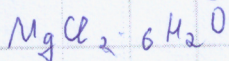
кристалды қызыл тұз -  $9,042$

3-есеп

Берілемі:  $\text{MgCl}$

$$m = 0,292$$

$\text{HCl} = 50 \text{ мл } 0,1 \text{ M}$   $V = 100 \text{ мл, } 300^\circ\text{C}$ -та қалдырылған



$\text{AgNO}_3 = 0,6322$  - ақ тұнба -  $50 \text{ мл}$   $\text{Fe}^-?$

$300^\circ\text{C}$ -та шөгетін ақ тұнба қалдырылған. Ерітіндісі -  $50 \text{ мл}$   $\text{HNO}_3 = 10,0 \text{ мл, } 0,05 \text{ M}$

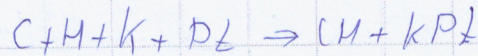
Бинобит -  $102$

$$\text{HCl} = 137 \text{ мл } 0,01 \text{ M}$$

натрийде -  $20 \text{ мл}$  ерітіндісімен әрекеттесе алады.

Zn

4. Берілемі:  $\text{CH}_4, \text{K}, \text{P}_2$



$$\rho = 3,13 \text{ г/л}$$

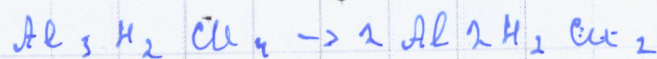
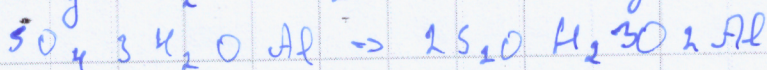
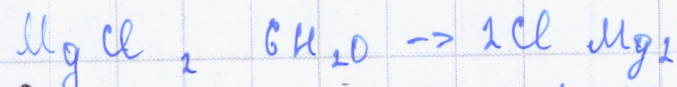
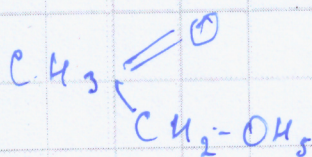
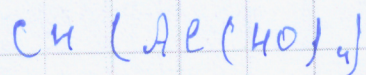
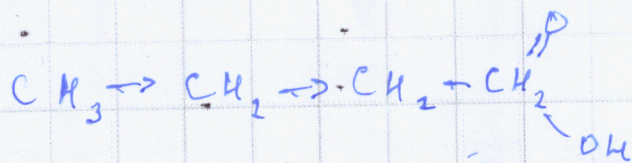
$$A_r(\text{P}_2) = 195$$

$$A_r(\text{C}) = 12$$

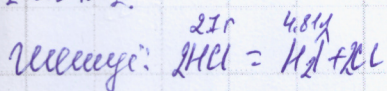
Т/к: X-?

УЮ ПАК -

$$A_r(\text{H}) = 1$$

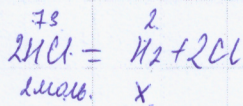
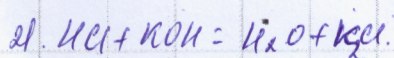
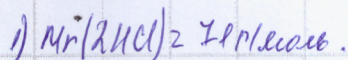


Есеп №1.



$$m(2\text{HCl}) = 2 \cdot 17 \cdot 100 = 3400$$

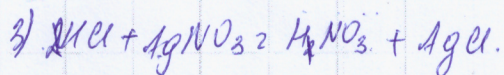
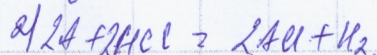
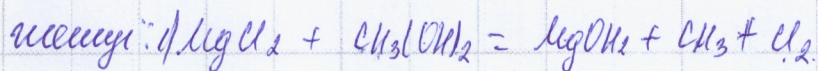
$$m(\text{H}_2) = 14 + 10,202 = 24,202$$



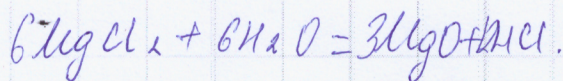
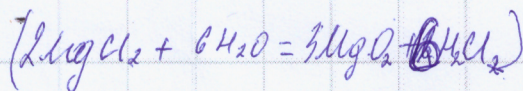
мол. x

$$x(\text{H}_2) = \frac{2 \cdot 17 \cdot 100}{73} = 46,575 \text{ г}$$

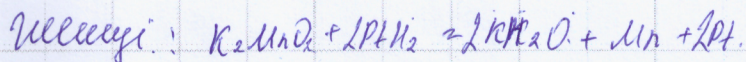
Есеп №3.



$$w(\text{Cl}) = \frac{0,297 \cdot 100\%}{0,632} = 46,99\%$$



Есеп №4.



$$n(\text{HCl}) = \frac{22,4 \text{ л}}{22,4 \text{ л/моль}} = 1 \text{ моль}$$

Берілгені:

$$m_1 = 272$$

$$V = 4,8 \text{ л}$$

$$T = 20^\circ \text{C}$$

$$m_2 = 132$$

$$m_3 = 192$$

$$\mu = ?$$

№2.

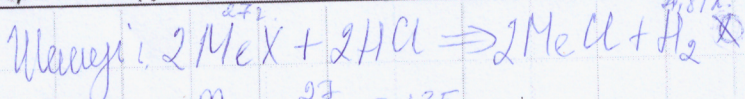
Берілгені:

$$B = 52$$

$$B \cdot n \text{H}_2\text{O} = 9,042$$

$$n = ?$$

№3



$$\mu = \frac{m}{n} = \frac{27}{0,2} = 135$$

$$n = \frac{V}{V_n} = \frac{4,8 \text{ л}}{22,4 \text{ л}} = 0,2$$

Келесі:

$$n =$$

№1. Заттар қоспасы

Феридгені:

(Me(II) ксіе X) - 272

HCl нәтижесінде 9,81 г сутейі (20°C, 1 атм).

Қоспа массе азайды - 132

$n(O)$  - массе 19,20 г ортти.

1)  $n(HCl) = 272$

2) KOH - 56 25% сүмі танызған 1,185

№2 Феридіз заттар

Феридгені:

Шешуі:  $20,2\% \cdot 5 = 10,10$

X-тоң массалық үлесі 20,2%

$B \cdot H_2O = 5 \cdot 1 \cdot 2 \cdot 16 = 160$

B - 52

$B \cdot H_2O$  қорықуы 9,04 г

n - ?

№3 Феридгені

$(MgCl_2 \cdot 6H_2O) = (24 + 35 \cdot 2) \cdot (6 \cdot 1 \cdot 2 \cdot 16) = 118 \cdot 192 = 22456$

Cl - 35

№4 Феридіз көшірсүтек

к. г - 22,4

танызған - 3,13 г/л

Шешуі:  $22,4 + 3,13 = 25,53$

1) Дано.

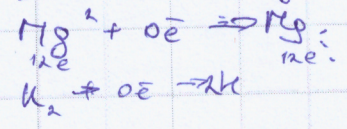
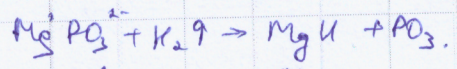
$Mg(\bar{H})$ ;  $m(\text{соль-кисл}) = 27 \text{ г}$ .  
 $x$   
 брел.  $K = 4,81 \text{ г}$ . ( $20^\circ \text{C}$ , 100 г).  
 $m(H) = x$ , уменьшилось на 137.  
 $m(K) = x$ , увеличилось на 13,202.

Простые в-ва и моль доли

1)  $V(\text{Cl}_2) = ?$ , в 25% растворе  $\approx 1,185 \frac{\text{г}}{\text{мл}}$ .

Решение.

Всего  $K = 4,81 \text{ г}$ .  $\approx 22,19 \text{ г}$ ,  
 после вычитания  $(K)$



уменьш.  $\rightarrow 22,19 - 13 = 9,19$

увел.  $\rightarrow 9,19 + 13,20 = 22,39$

$100\% = (22,39 \frac{\text{г}}{\text{мл}}) \cdot x$

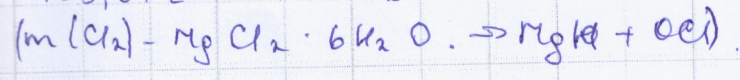
$25\% = 1,185 \frac{\text{г}}{\text{мл}}$

$x = \frac{100 \cdot 1,185}{25} = \frac{118,5}{25} = 4,74$

2) Дано.

A - элемент с избытком  $Cr$  и превращен с  $Cl_2$ .  $Cr$  в  $5 - 171$ .  $\rightarrow$   
 $\rightarrow$  образ. соль- $B$  и ток  $Cr$ .

$m = 9,04 \text{ г} = B \cdot K \cdot H_2O$



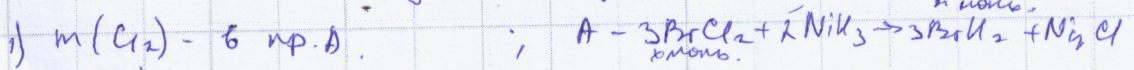
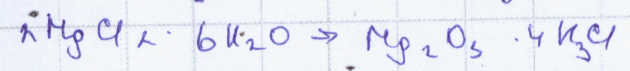
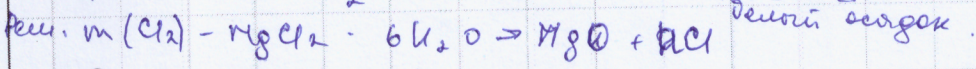
3) Дано.

$MgCl_2 \cdot 6H_2O$  - много.

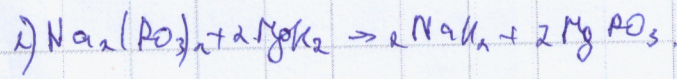
A - продукт  $\rightarrow MgClPO_3^{2-} \rightarrow$  корень  $300^\circ \text{C}$ .

$m(A) = 0,251 \text{ г} \rightarrow$  растворен в  $50 \text{ мл}$ .  $0,1 \text{ M}$ .

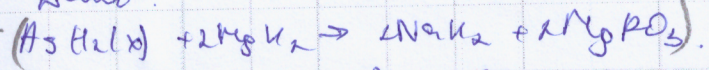
$x = 100 \text{ мл}$ ;  $\frac{x}{2} = 50 \text{ мл}$ .  $+ Sr \rightarrow 0,632 \text{ г}$ .



$m(A) = 0,251 \text{ г}$

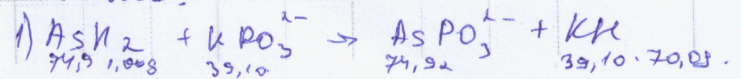


4) Дано.



$AsK_2(x) - V = 3,13 \frac{\text{г}}{\text{л}} \rightarrow K$ ;  $\rightarrow K$  с  $AsH_3$   $\rightarrow AsH_3$ ;  $\rightarrow C$   $AsH_3$   $\rightarrow C$   $AsH_3$

Решение.



2)  $x = AsK_2$ ,  
 $A = B = H$