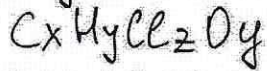


57

Задача 1.1.



$$x + y + z + u = 22$$

$$z = 2u$$

$$y = 2u$$

$$x = 6u$$

$$6u + 2u + 2u + u = 22$$

$$11u = 22$$

$$u = 2 \Rightarrow y = 4 = z, x = 12$$

Ответ: $C_{12}H_4Cl_4O_2$ (+) (8)

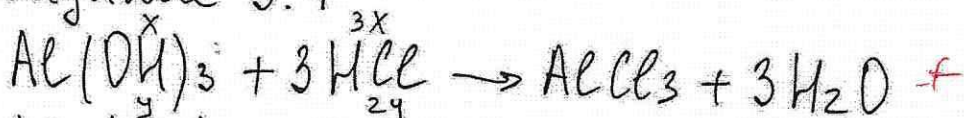
557
53
57

Задача 2.1



(9)

Задача 3.1



$$m(HCl) = 3193,75 \cdot 0,12 = 383,25$$

$$\text{Пусть } Al(OH)_3 = x \text{ моль} \Rightarrow HCl = 3x \text{ моль}$$

$$\text{Пусть } Mg(OH)_2 = y \text{ моль} \Rightarrow HCl = 2y \text{ моль}$$

$$m(HCl)_1 = 109,5x$$

$$m(HCl)_2 = 73y$$

$$m(Mg(OH)_2) = 58y$$

$$m(Al(OH)_3) = 78x$$

$$\begin{cases} 109,5x + 73y = 383,25 \\ 78x + 58y = 282 \end{cases}$$

$$\begin{cases} y = 5,25 - 1,5x \\ 22,5 = 9x \end{cases}$$

$$\begin{cases} x = 2,5 \\ y = 1,5 \end{cases}$$

$$x = 2,5$$

$$y = 1,5$$



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$$\begin{array}{cccccc|cc|cc} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\ 8 & 4 & 10 & 10 & 10 & 2 & 1 & 2 & 4 & 6 \end{array}$$

Задача 3.1.

Значит, $m(\text{Al}(\text{OH})_3) = 195 \text{ г}$

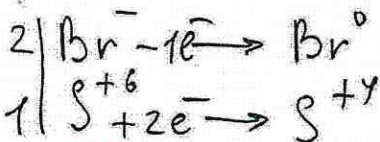
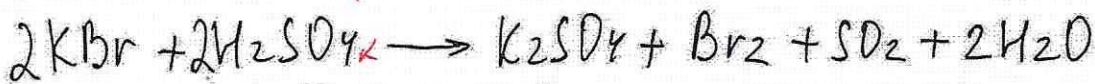
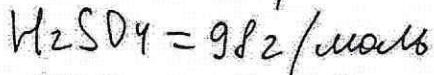
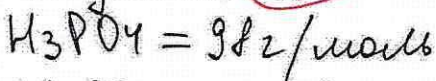
$m(\text{Mg}(\text{OH})_2) = 87 \text{ г}$

$w(\text{Mg}) + w(\text{Al}(\text{OH})_3) = \frac{195}{282} = 69,15\%$

$w(\text{Mg}(\text{OH})_2) = \frac{87}{282} = 30,85\%$

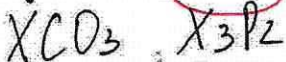
10

Задача 4.1



10

Задача 6.1

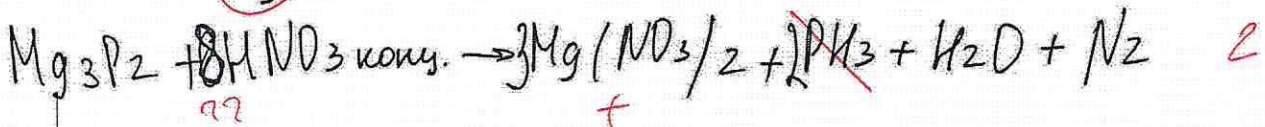


$\frac{M(\text{X}_3\text{P}_2)}{M(\text{XCO}_3)} = 1,5952$

$\frac{3X + 62}{X + 60} = 1,5952$

$X = 24 - \text{Mg}$

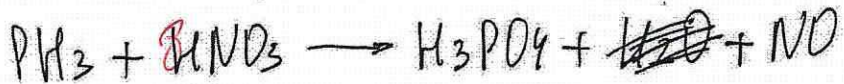
Ответ: Mg 2



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Задача 9.1.

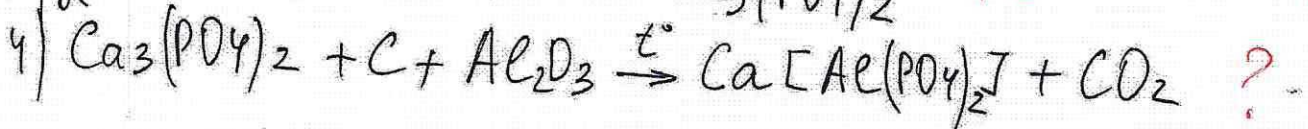
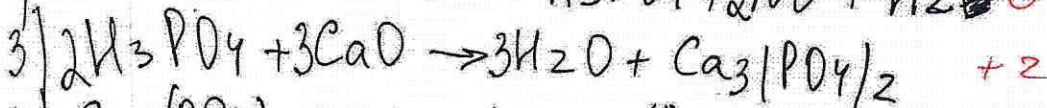
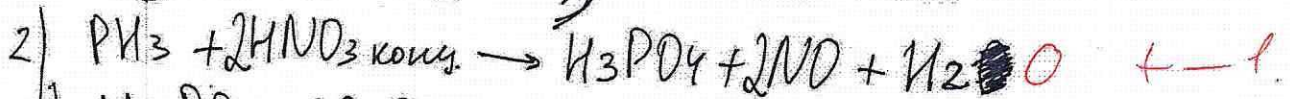
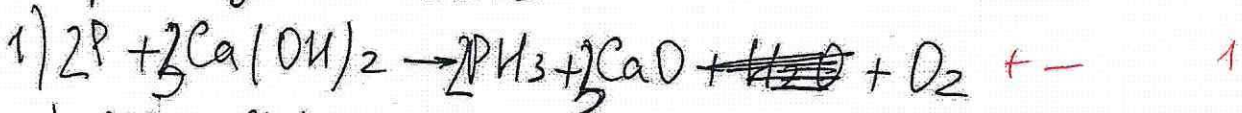


PH₃ - бесцв. ядов. газ

белаш. известв. - CaO

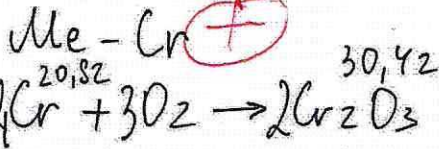
уголь - C

кремнезем - Al₂O₃



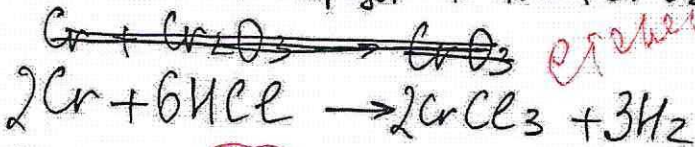
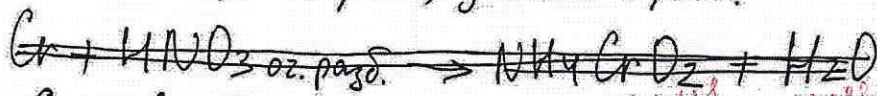
Задача 10.1

Cr



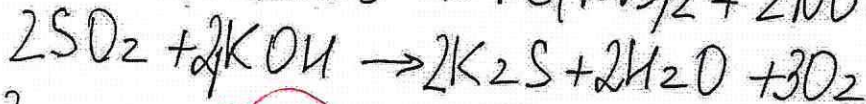
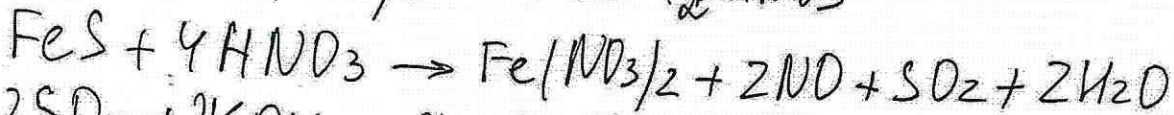
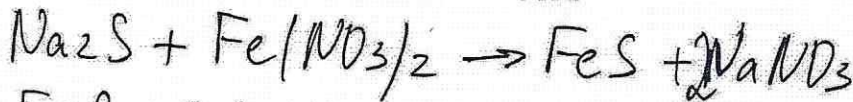
$\nu(\text{Cr}) = 0,4$ *гипотеза*
 $\nu(\text{Cr}_2\text{O}_3) = 0,2$
 0,1 = 0,1 - верно, значит пром.

6

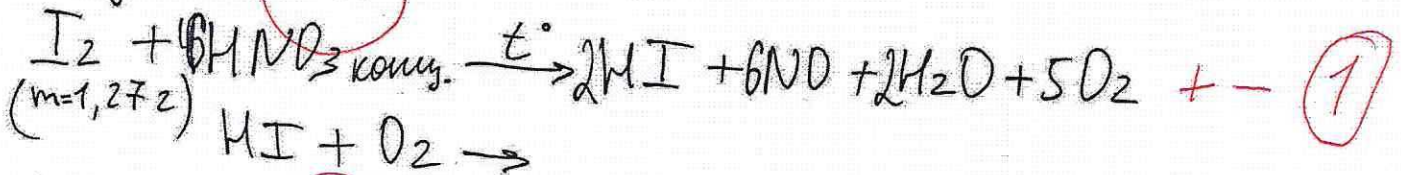


срешив окислитель в кислой среде

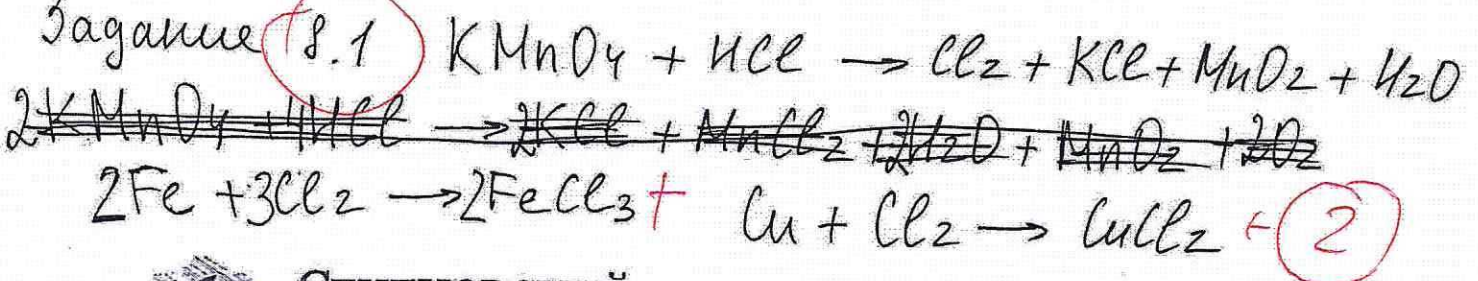
Задача 5.1



Задача 7.1



Задача 8.1



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