

66.

1 2 3 4 5 6 7 8 9 10  
8 8 9 - 10 5 5 9 6 6

Σ 66

1.1

Пусть атомов O - x, тогда атомов H и Cl по 2x, а атомов C - 6x.

$$x + 2x + 2x + 6x = 22$$

$$x = 2$$

Формула:  $C_{12}H_4Cl_4O_2$  8

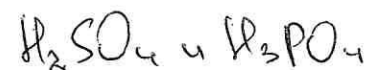
~~2.1~~



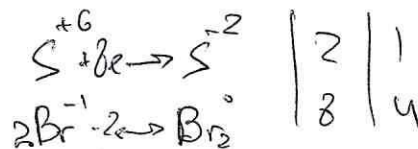
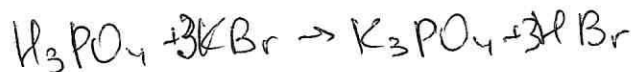
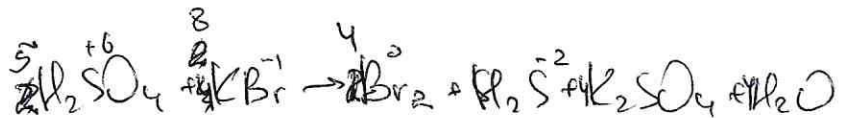
$$M(K_2MnO_4) > M(KMnO_4)$$



~~4.1~~



$$\begin{array}{l} 2 \cdot 32 + 16 \cdot 4 \\ 98 \end{array} \quad \begin{array}{l} 3 \cdot 31 + 16 \cdot 4 \\ 98 \end{array}$$



3.1



Пусть  $Mg(OH)_2$  -  $x$  г. Тогда  $Al(OH)_3$  -  $(282-x)$  г. В соляной кислоте - 3193.75 г. 12:16

$$\frac{x}{24+17 \cdot 2} \cdot 2 \cdot 36.5 + \frac{282-x}{27+17 \cdot 3} \cdot 3 \cdot 36.5 = 3193.75 \cdot 12:1600$$

↑  
кол-во моле  
 $Mg(OH)_2$   
-----  
масса HCl  
1 р-уча

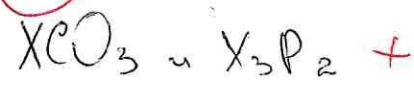
↑  
кол-во моле  
 $Al(OH)_3$   
-----  
масса HCl  
2 р-уча

Отсюда  $x = 87$ .

Тогда  $\omega(Mg(OH)_2) = \frac{87}{282} = 0.3$   $\omega(Al(OH)_3) = 1 - 0.3 = 0.7$  9

Ответ:  $\omega(Mg(OH)_2) = 0.3$ ,  $\omega(Al(OH)_3) = 0.7$ .

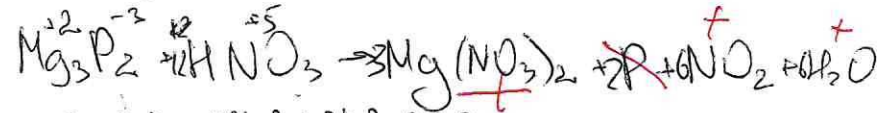
6.1



$M(X_3P_2) = M(XCO_3) \cdot 1.5952$

$3X + 2 \cdot 31 = 1.5952X + 1.5952 \cdot 12 + 1.5952 \cdot 48$

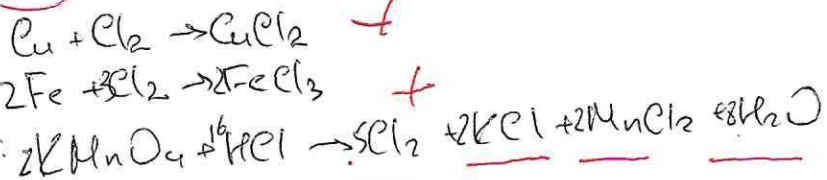
Отсюда  $X = M(X)$  (по, что  $X$  обозначен за  $X$ ) = 24  $\Rightarrow$  это Mg. 2



$m(NO_2) = \frac{24 \cdot 3 + 31 \cdot 2}{24 \cdot 3 + 31 \cdot 2} \cdot 6 \cdot (14 + 32) = 55.2$  3



8.1



4

$n(Cl_2) = \frac{6.32}{35.5 \cdot 2} = 0.1$

Предположим, что меди x г.

$\frac{x}{64} + \frac{6-x}{56} \cdot 2.3 = 0.1$

$x = 5.44$

$\omega(Cu) = \frac{5.44}{6} = 0.9$

$\omega(Fe) = 1 - 0.9 = 0.1$

Ответ:  $\omega(Cu) = 0.9, \omega(Fe) = 0.1$

9

10.1

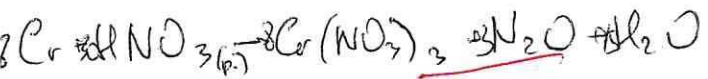


~~$\frac{20.8}{x} \cdot 2 = 30.4$~~

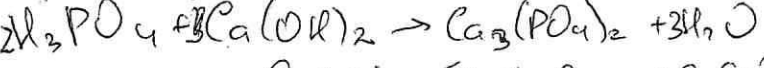
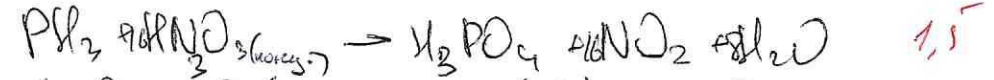
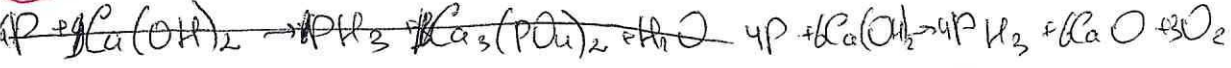
$\frac{20.8}{x} \cdot 2 \cdot (2X + 48) = 30.4$

$x = 52 \rightarrow металл = Cr$  +

6



9.1

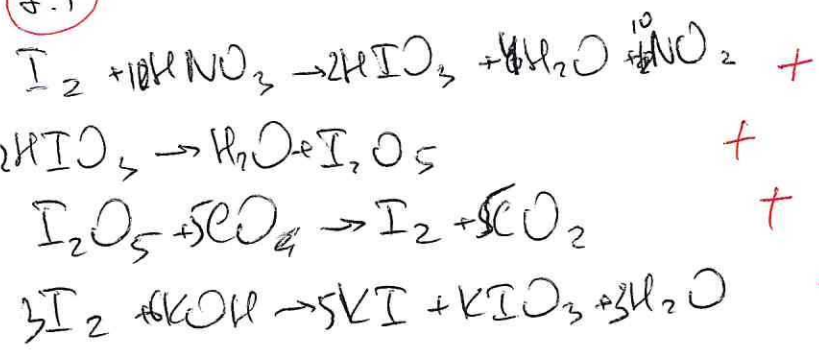


6





7.1

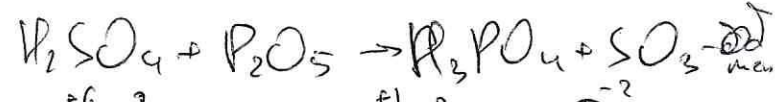
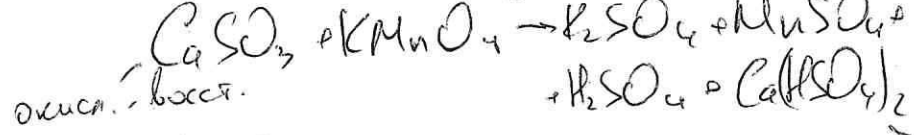
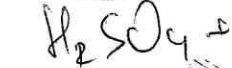
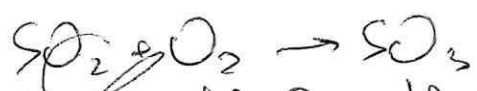
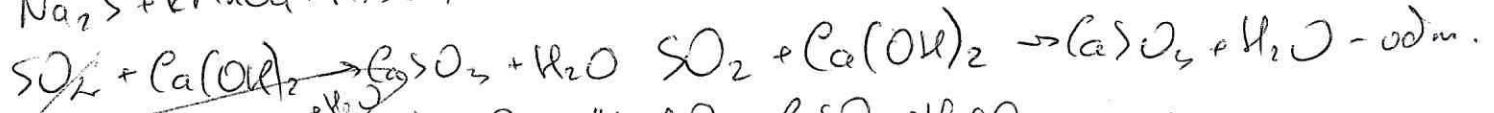
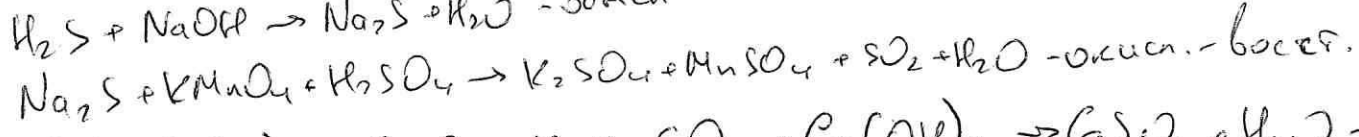
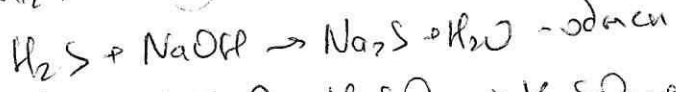
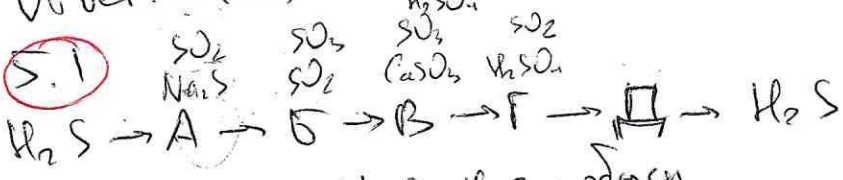


$$\begin{aligned}
 n(I_2) &= \frac{1.27}{127} = 0.01 \\
 n(HI O_3) &= 0.02 \\
 n(I_2 O_5) &= 0.01 \\
 n(I_2) &= 0.01 \\
 n(KI) &= \frac{1}{60} \\
 n(KI O_3) &= \frac{1}{300}
 \end{aligned}$$

$$\begin{aligned}
 m(KI) &= \frac{1}{60} \cdot (39 + 127) = 2.77 \text{ г} \\
 m(KI O_3) &= \frac{1}{300} \cdot (39 + 127 + 48) = 0.71 \text{ г}
 \end{aligned}$$

Отвечая:  $m(KI) = 2.77 \text{ г}$ ,  $m(KI O_3) = 0.71 \text{ г}$ .

5.1



окисл.-восст.

10



□ □ □ □ □