

7-8

- 4

1.

500 10%-
25%-

()	
1.	2
2. $m(\text{BaCl}_2) = 500 \cdot 0,1 = 50$ ()	2
3. $m(\text{BaCl}_2) = (50 +)$	2
4. $(500 +)$	2
5. $(\text{BaCl}_2) = m(\text{BaCl}_2) / m(-)$	2
6. $0,25 = (50 +) / (500 +)$	2
7. $: = 100; m(\text{BaCl}_2) = 100$	2
8. $\text{Ba}^{2+} + \text{H}_2\text{SO}_4 = \text{BaSO}_4 + 2\text{H}^+$ $\text{BaCl}_2 + \text{H}_2\text{SO}_4 = \text{BaSO}_4 + 2\text{HCl}$	2 1
9. $\text{Cl}^- + \text{AgNO}_3 = \text{AgCl} + \text{NO}_3^-$ $\text{BaCl}_2 + 2\text{AgNO}_3 = 2\text{AgCl} + \text{Ba}(\text{NO}_3)_2$	2 1
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2.

100 , 10%
100
10%

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1. $m(\text{NH}_4)_2\text{CO}_3 = 100 \cdot 0,9 = 90$. 10%, - 90%	2
2. $(\text{NH}_4)_2\text{CO}_3 = 96 /$	2
3. $n((\text{NH}_4)_2\text{CO}_3) = 90 / 96 / = 0,94$	2
4. $n(\text{N}) = 2n((\text{NH}_4)_2\text{CO}_3) = 2 \cdot 0,94 = 1,88$	3
5.	

$N(N) = n(N) \cdot N ; N(N) = 1,88 \cdot 6,02 \cdot 10^{23} = 1,13 \cdot 10^{24}$	3
6. $(NH_4)_2CO_3 = 2NH_3 + H_2O + CO_2$	4
7. $n((NH_4)_2CO_3) = n(CO_2) = 0,94$	2
8. $V(CO_2) = 0,94 \cdot 22,4 / = 21$	2
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3.

1. $Fe_2O_3 + H_2 =$
2. $NH_3 + O_2 =$
3. $HBrO_3 + HBr$
4. $Pb(NO_3)_2 + Na_2S =$
5. $Na_2SO_4 + AgNO_3 =$
6. $FeSO_4 + KOH =$
7. $Al_2S_3 + H_2O =$
8. $Mg + N_2 =$
9. $Li_3N + H_2O =$
10. $HCl + CrO_3 =$

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1. $Fe_2O_3 + 3H_2 = 2Fe + 3H_2$	2
2. $4NH_3 + 3O_2 = 2N_2 + 6H_2O$	2
3. $HBrO_3 + 5HBr = 3Br_2 + 3H_2O$	2
4. $Pb(NO_3)_2 + Na_2S = PbS + 2NaNO_3$	2
5. $Na_2SO_4 + 2AgNO_3 = 2NaNO_3 + Ag_2SO_4$	2
6. $FeSO_4 + 2KOH = Fe(OH)_2 + K_2SO_4$	2
7. $Al_2S_3 + 6H_2O = 2Al(OH)_3 + 3H_2S$	2
8. $3Mg + N_2 = Mg_3N_2$	2
9. $Li_3N + 3H_2O = 3LiOH + NH_3$	2
10. $12HCl + 2CrO_3 = 3Cl_2 + 2CrCl_3 + 6H_2O$	2
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4.

- (IV) 100 ,
- 91% .
1. .
 2. , ,
 3. (IV) ?
 4. , , .

:

(,)	
1. $\text{CaO} + \text{O}_2 = \text{CaO}_3$ (1)	2
2. : $m(\text{O}_3) = 100 \cdot 0,91 = 91$ ()	2
3. $n(\text{O}_3) = 91 : 56 / 100 = 1,625$.	2
4. $n(\text{O}_3) = n(\text{O}_2) = 1,625$ (1)	2
5. $m(\text{O}_2) = 1,625 \cdot 32 \cdot 100 / 100 = 162,5$.	2
6. $n(\text{O}_2) = n(\text{O}_3) = 1,625$.	2
7. $V(\text{O}_2) = 1,625 \cdot 22,4 / 100 = 36,4$.	2
8. $\text{SO}_4 \cdot 2 \text{H}_2\text{O}$ - () ₂	2
- $\text{SO}_4 \cdot 2 \text{H}_2\text{O}$	2
- H_2O	2
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5.

- 1) , 2) , 3) (III), 4) :
 5) (III), 6) (II), 7) , 8) ,
 9) , 10) .
 , - , - ?
 :

(,)	
1. , K_2CrO_4 -	2
2. , $\text{K}_2\text{Cr}_2\text{O}_7$ -	2
3. (III), $\text{Cr}_2(\text{SO}_4)_3$ -	2
4. , $\text{Al}(\text{NO}_3)_3$ -	2
5. (III), FeCl_3 - -	2
6. (II), FeSO_4 - -	2
7. (II), CuSO_4 -	2
8. , KMnO_4 -	2
9. , K_2MnO_4 -	2
10. , I_2 - -	2
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