

:
9-1 (10)
 () , :

$$2 \text{Hg} + \text{O}_2 \rightleftharpoons 2\text{HgO} \quad (T_2 > T_1)$$

$$\text{HgO},$$
 350
 500
 0,005 (n(O₂) = 1/2n(Hg); n(Hg) = 2/201 = 0,01).

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9-2 (10)
 $\text{NaHCO}_3 + \text{NaOH} \rightarrow \text{Na}_2\text{CO}_3 + \text{H}_2\text{O}$
 $\text{NaHCO}_3 -$
 $\text{AlOHCl}_2 + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2\text{O}$
 $\text{AlOHCl}_2 -$

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9-3 (20)
 $2 \text{HCl} + \text{Zn} \rightarrow \text{ZnCl}_2 + \text{H}_2$
 $2 \text{HCl} + \text{CaCO}_3 \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2$
 n(HCl) = 20/36,5 = 0,548
 n(Zn) = 20/65 = 0,308 ; n(H₂) = n(Zn); m(H₂) = 0,308 · 2 = 0,616
 n(CaCO₃) = 20/100 = 0,2 ; n(CO₂) = n(CaCO₃); m(CO₂) = 0,2 · 44 = 8,8

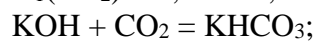
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9-4 (15)
 $m(\text{CuSO}_4) = (150/250) \cdot 160 = 96$
 $96/(150 + x) = 5/100$
 $x = 1770$
 $V(\text{H}_2\text{O}) = 1770$

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9-5 (25)
 (II)
 $= 2 \cdot 16 = 32.$
 X). : 44 + 28(1 -) = 32. = 0,25.
 - 1 . , 0,25 ,
 (II) - 0,75 .

m(KOH) = 56 · 0,01 = 0,56 ;
 n(KOH) = 0,56/56 = 0,01 ;
 $2\text{KOH} + \text{CO}_2 = \text{K}_2\text{CO}_3 + \text{H}_2\text{O};$

$$V_1(\text{CO}_2) = 0,005 \cdot 22,4 = 0,112 \text{ ;}$$



$$V_2(\text{CO}_2) = 0,01 \cdot 22,4 = 0,224 \text{ ;}$$

0,25

$$m(\text{KHCO}_3) = 0,01 \cdot 100 = 1 \text{ .}$$

-10 ,

KOH- 5 ,

-10 .

9-6 (20)

1.
n(N) : n(H)

: N(N) : N(H)=

2.

(V_m).

$$3. n(\text{N}_2) = V/V_m = 40/V_m$$

$$n(\text{NH}_3) = V/V_m = 10/V_m$$

$$n(\text{.N}) = 2n(\text{N}_2) + n(\text{NH}_3) = 90/V_m$$

$$n(\text{.H}) = 3n(\text{NH}_3) = 30/V_m$$

$$n(\text{.N})/n(\text{o .H}) = (90/V_m)/(30/V_m) = 3:1$$

4.

-20 .