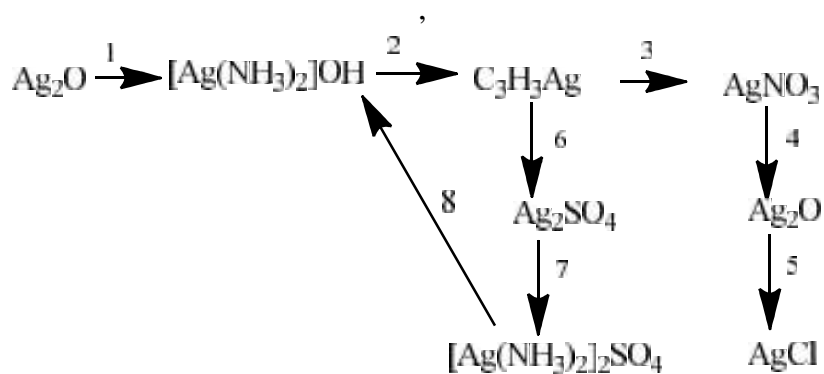


1.



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1. $\text{Ag}_2\text{O} + 4\text{NH}_3 + \text{H}_2\text{O} = 2[\text{Ag}(\text{NH}_3)_2]\text{OH}$	2
2. $[\text{Ag}(\text{NH}_3)_2]\text{OH} + \text{CH}_3 - \text{C} \equiv \text{CH} = \text{CH}_3 - \text{C} \equiv \text{CAg} + 2\text{NH}_3 + \text{H}_2\text{O}$	3
3. $\text{CH}_3 - \text{C} \equiv \text{CAg} + \text{HNO}_3 = \text{AgNO}_3 + \text{CH}_3 - \text{C} \equiv \text{CH}$	3
4. $2\text{AgNO}_3 + \text{KOH} = \text{Ag}_2\text{O} + 2\text{KNO}_3 + \text{H}_2\text{O}$	2
5. $\text{Ag}_2\text{O} + \text{HCl} = 2\text{AgCl} + \text{H}_2\text{O}$	2
6. $2 \text{CH}_3 - \text{C} \equiv \text{CAg} + \text{H}_2\text{SO}_4 = \text{Ag}_2\text{SO}_4 + \text{CH}_3 - \text{C} \equiv \text{CH}$	3
7. $\text{Ag}_2\text{SO}_4 + 2\text{NH}_3 = [\text{Ag}(\text{NH}_3)_2]_2\text{SO}_4$	2
8. $[\text{Ag}(\text{NH}_3)_2]_2\text{SO}_4 + \text{Ba}(\text{OH})_2 = 2[\text{Ag}(\text{NH}_3)_2]\text{OH} + \text{BaSO}_4$	3
	20

2.

- :
1. $\text{HClO} + \text{H}_2\text{O}$
 2. $+ \text{H}_2\text{O} = 2\text{HClO}$
 3. $= 2\text{HClO}_4$
 4. $= 3\text{KClO}_3 + \text{KCl}$
 5. $= 2\text{KCl} + 3\text{O}_2$
 6. $= 2\text{KHSO}_4 + \text{KClO}_4 + 2\text{ClO}_2 + \text{H}_2\text{O}$
- 1.
 2. **1, 4, 6**
 3. - ?

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1. $\text{Cl}_2 + \text{H}_2\text{O} \rightleftharpoons \text{HClO} + \text{HCl}$	2
$\text{Cl}^0 - 1e \quad \text{Cl}^{+1} \quad 1$	2
$\text{Cl}^0 + 1e \quad \text{Cl}^{-1} \quad 1$	

2.	$\text{Cl}_2\text{O} + \text{H}_2\text{O} = 2\text{HClO}$	2
3.	$\text{Cl}_2\text{O}_7 + \text{H}_2\text{O} = 2\text{HClO}_4$	2
4.	$4\text{KClO}_3 = 3\text{KClO}_4 + \text{KCl}$ = 400°	2 1
	$\text{Cl}^{+5} - 2e \quad \text{Cl}^{+7} \quad 3$ $\text{Cl}^{+5} + 6e \quad \text{Cl}^{-1} \quad 1$	2
5.	$2\text{KClO}_3 = 2\text{KCl} + 3\text{O}_2$ T = 150-300°C, MnO_2	1 1
6.	$3\text{KClO}_3 + 2\text{H}_2\text{SO}_4(\quad) = 2 \text{HSO}_4 + \text{KClO}_4 + 2\text{ClO}_2 + \text{H}_2\text{O}$	2
	$\text{Cl}^{+5} - 2e \quad \text{Cl}^{+7} \quad 2$ $\text{Cl}^{+5} + 4e \quad \text{Cl}^{+1} \quad 1$	2
7.		1
		20

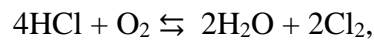
3.

1. 11,2
51,92 10%- NaOH 1,08 / .
- :

(,)	
1. $\text{CH}_3\text{COOC}_2\text{H}_5 + \text{NaOH} \rightarrow \text{CH}_3\text{COONa} + \text{C}_2\text{H}_5\text{OH}$ $\text{HCOOC}_2\text{H}_5 + \text{NaOH} \rightarrow \text{HCOONa} + \text{C}_2\text{H}_5\text{OH}$	3
2. $m(\text{CH}_3\text{COOC}_2\text{H}_5) = X$, $m(\text{HCOOC}_2\text{H}_5) = (11,2 - X)$	3
3. $n(\text{CH}_3\text{COOC}_2\text{H}_5) = m(\text{CH}_3\text{COOC}_2\text{H}_5)/M(\text{CH}_3\text{COOC}_2\text{H}_5) = X/90$ $n(\text{HCOOC}_2\text{H}_5) = m(\text{HCOOC}_2\text{H}_5)/M(\text{HCOOC}_2\text{H}_5) = (11,2 -)/74$	2
4. $m(\text{NaOH}) = V /100 = 10 \cdot 51,92 \cdot 1,08/100 = 5,6$	2
5. $n(\text{NaOH}) = m(\text{NaOH})/M(\text{NaOH}) = 5,6/40 = 0,14$	2
6. $n(\text{NaOH}) = n(\text{CH}_3\text{COOC}_2\text{H}_5) + n(\text{HCOOC}_2\text{H}_5)$ $0,14 = /90 + (11,2-)/74$	2
7. $= 4,725$	2
8. $m(\text{CH}_3\text{COOC}_2\text{H}_5) = 4,725$ $m(\text{HCOOC}_2\text{H}_5) = 11,2 - 4,725 = 6,475$	2
9. $(\text{H}_3\text{COOC}_2\text{H}_5) = m(\text{H}_3\text{COOC}_2\text{H}_5)/m = 4,725/11,2 \cdot 100\% = 42\%$ $(\text{HCOOC}_2\text{H}_5) = m(\text{HCOOC}_2\text{H}_5)/m = 6.475/11,2 \cdot 100\% = 58\%$	2
	20

4.

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16,9.

1.

50%

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(,)	
1. () = 16,9 • (2) = 16,9 • 2 = 33,8 /	2
2. - HCl , (1-) -	2
3. 36,5 + 32(1-) = 33,8	2
4. : = 0,4	2
5. 100 , HCl	2
40 , 2 - 60 .	
6. 100% 20 , . . . 40 50% ,	2
10 .	
7. 5 10 , 20	2
8. HCl 10 : 2 10 Cl ₂ 40 - 20 = 20 2 60 - 5 = 55	4
9. : Cl ₂ :O ₂ :HCl:H ₂ O = 20:55:10:10 = 4:11:2:2	2
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5.

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2.

3.

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1.	:	,	
	.		
		- BaCl ₂	2
		- Ba(MnO ₄) ₂	2
2.	:		
		- BaSO ₄	3,
			1
3.			-
		- Ba ₃ (O ₄) ₂	,
			2
4.			,
			2
5.			
		-	BaSO ₃ ,
		-	BaCO ₃
			2
			2
6.	:		
)		Ba ₃ (PO ₄) ₂ + 6HCl = 3BaCl ₂ + 2H ₃ PO ₄	1
)		BaCO ₃ + 2HCl = BaCl ₂ + CO ₂ + H ₂ O	1
)		BaSO ₃ + 2HCl = BaCl ₂ + H ₂ O + SO ₂	1
)		5SO ₂ + Ba(MnO ₄) ₂ = 2SO ₃ + 2MnSO ₄ + BaSO ₄	2
)		Ba(MnO ₄) ₂ + 16HCl = 2MnCl ₂ + BaCl ₂ + 5Cl ₂ + 8H ₂ O	2
			20