

ШИФР _____

114270

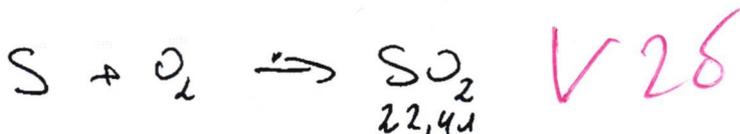
Класс 10 Вариант 6 Дата Олимпиады 19.02.2023

Площадка написания ГОРЬКИЙ УНИВЕРСИТЕТ

Задача	1	2	3	4	5	6	7	8	9	10	Σ		Подпись	
											Цифрой	Прописью		
Оценка												64	шестьдесят четыре	

10 16 0 6 14 12 0 6 — —

N1



1) $n(SO_2) = \frac{22,4}{22,4} = 1 \text{ моль}$ $V 25$

2) $n(SO_2) = n(S) \Rightarrow 1 \text{ моль}$ $V 25$

3) $m(S) = 32 \cdot 1 = 32$ $V 25$

4) $m(\text{примесей}) = 38 - 32 = 6$ $V 25$

6г

Ответ: 6г

N3

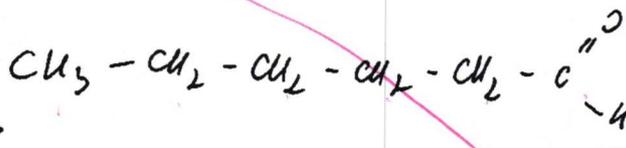
Альдегид (100%)

H_2
12%

C, O_2
88%

12 атомов H_2

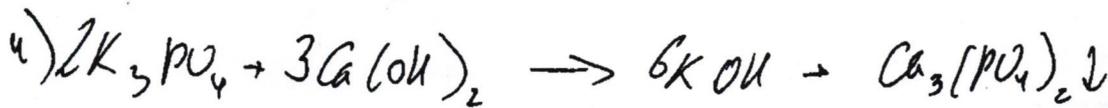
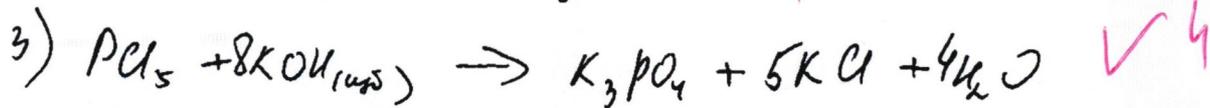
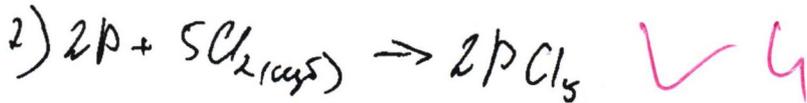
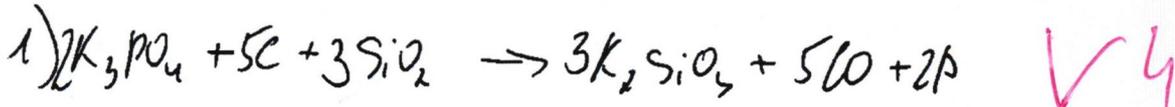
$$w(H) = \frac{1 \cdot 12}{n(C) + n(H) + n(O)} = \frac{1 \cdot 12}{12 + 12 + 16} = 0,12 = 12\%$$



Ответ: ГЕКСАНАЛЬ-1

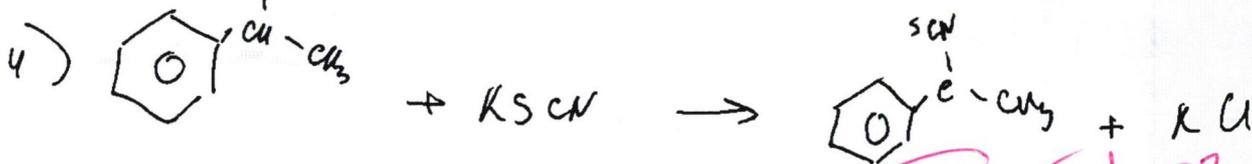
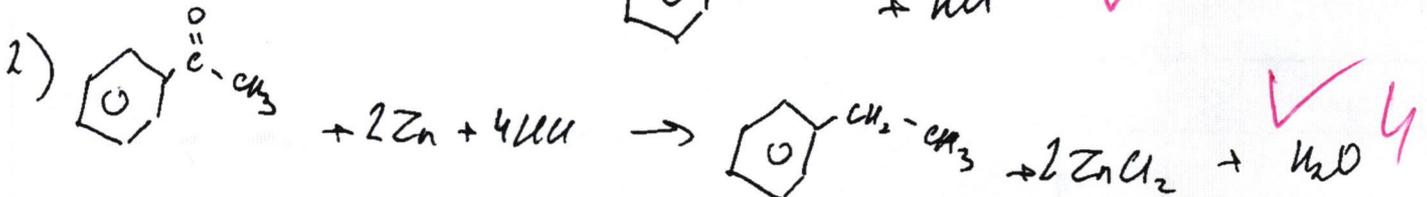
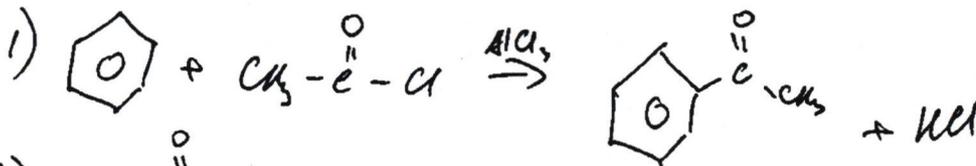
1 ш, 4

N6



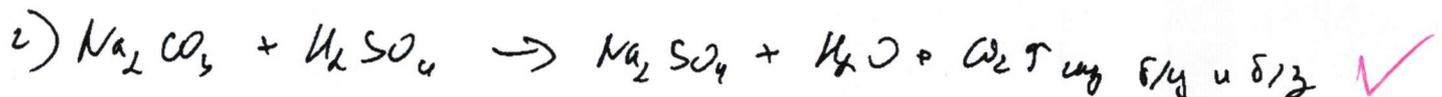
Σ160

N5



Σ148

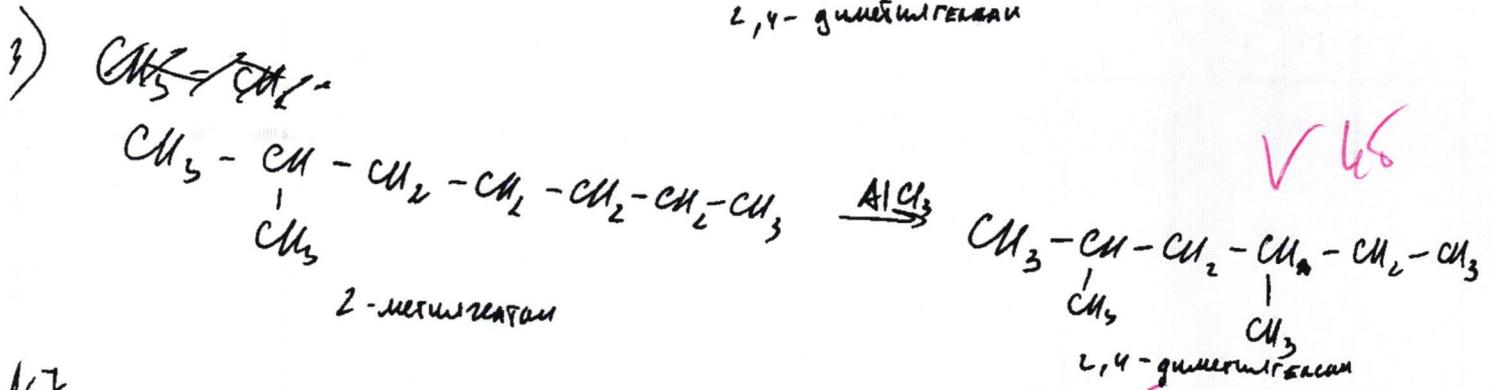
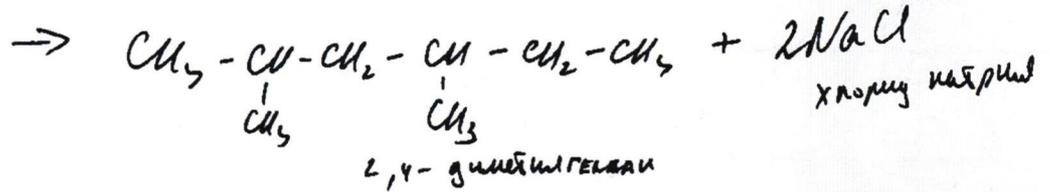
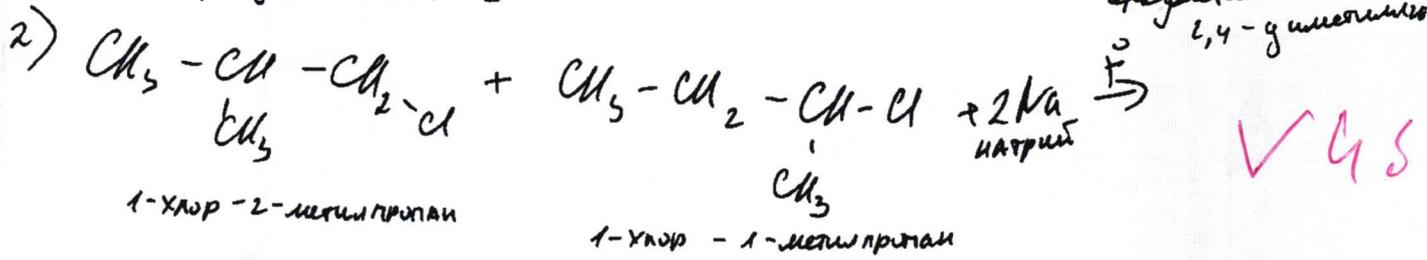
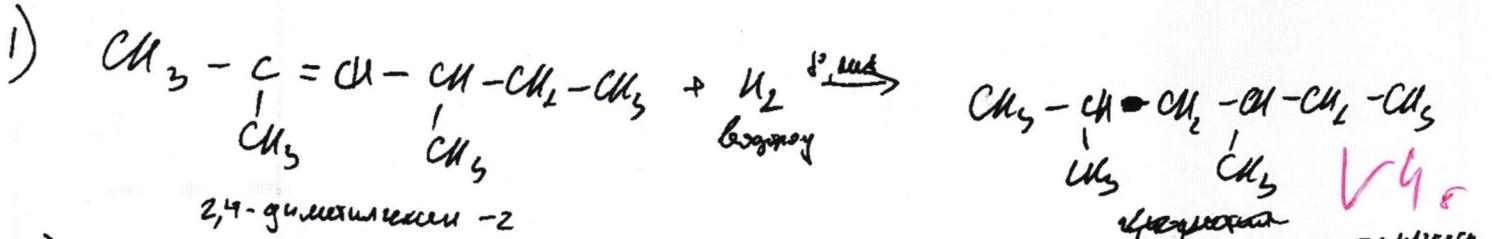
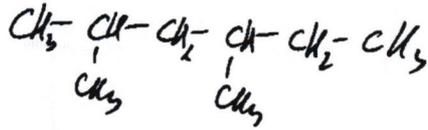
N8



белый осадок, малорастворимый

Σ68

N 6



N 7

$n(\text{K}_2\text{O}) = 1,0 \text{ моль}$

$n(\text{K}_2\text{CO}_3) = \frac{1}{71} = 0,014 \text{ моль}$

$n(\text{CaCO}_3) = \frac{2}{100} = 0,02 \text{ моль}$

$n(\text{смеси}) = n(\text{K}_2\text{O}) + n(\text{CaCO}_3) = 0,034 \text{ моль}$

$200 \text{ см}^3 = 0,2 \text{ л}$

$T_1 = 1273 \text{ К}$

$T_2 = 298 \text{ К}$

$p_1 V = \nu R T_1$; $p_2 V = \nu R T_2$; $p_2 = \frac{T_2 p_1}{T_1}$

$p_1 = \frac{\nu R T_1}{V}$

$p_2 = 420 \text{ Па}$

$p_1 = 1798,4 \text{ Па}$

Ответ: $p_2 = 420 \text{ Па}$

реакция?

~~№~~ №4

$$D(C_2) = 70$$

$C_n H_{2n}$ - Алкен

$$в. 12n + 2n = 70$$

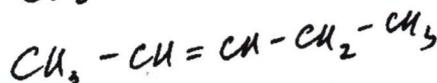
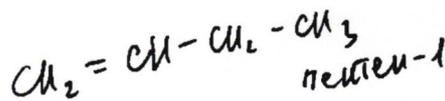
$$14n = 70$$

$$n = 5$$

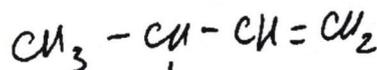
5-атомов углерода

✓ 68

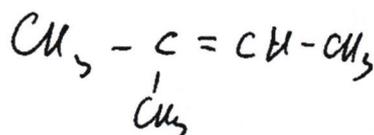
68



пентен-2



3-метилбутен-1



3-метилбутен-2