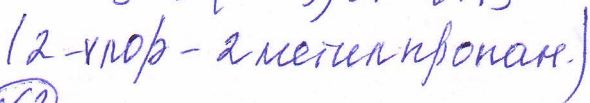
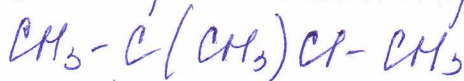
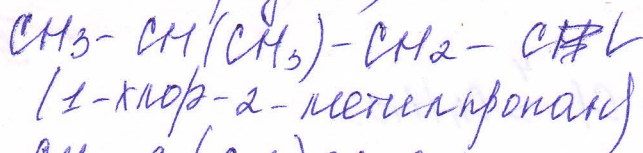
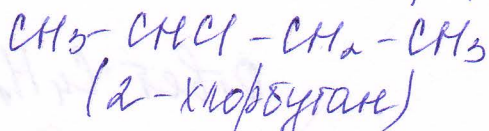
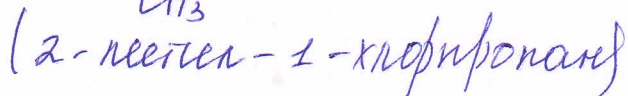
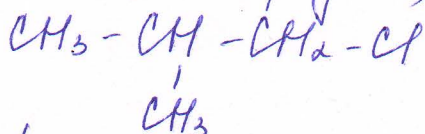
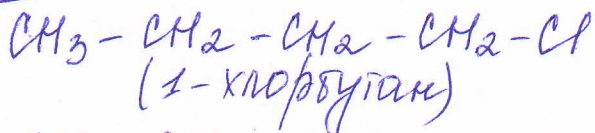




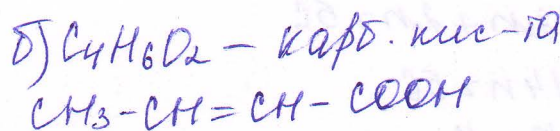
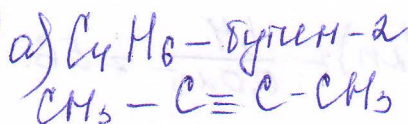
Школьный этап Всероссийской олимпиады школьников по химии

ученика (цы) 10 класса ААлиев Алиев

№1



№3



50.

№2

Дано:

$$w(\text{H}_2\text{SO}_4) = 70\%$$

$$\rho = 1,413 \text{ г/мл}$$

$$m(\text{SO}_3) = 10 \text{ г}$$

$$w(\text{SO}_3) = 30\%$$

$$V(\text{H}_2\text{SO}_4 \text{ р-р}) = ?$$

Решение:

г.к. масса oleuma 10 г, 10

$$m(\text{SO}_3) = 10 \text{ г}, m(\text{H}_2\text{SO}_4) = 7 \text{ г}$$



$$m(\text{H}_2\text{SO}_4) = 0,0375 \cdot 98 = 3,675 \text{ г}$$

$$m(\text{H}_2\text{SO}_4 \text{ р-р } 70\%) = \frac{(0,7x + 7 + 3,675)}{x + 10} = 0,85$$

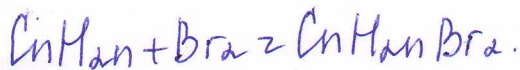
$$x = 14,5 \text{ г}$$

$$V(\text{H}_2\text{SO}_4) = \frac{14,5}{1,413} = 10,26 \text{ мл}$$

Ответ: 10,26 мл.

70.

(W4)



$$n(Br_2) = \frac{m}{14}$$

$$M(Br_2) = 160 \text{ г/моль}$$

$$m_2(Br_2) = \frac{4}{160} = 0,025 \text{ моль}$$

$$n(Br_2) = n(C_n H_m) \quad n(C_n H_m) = 0,025 \text{ моль}$$

$$M(C_n H_m) = \frac{m}{n}$$

$$M(C_n H_m) = \frac{1,4}{0,025} = 56$$

$$12n + 2n = 56$$

$$14n = 56$$

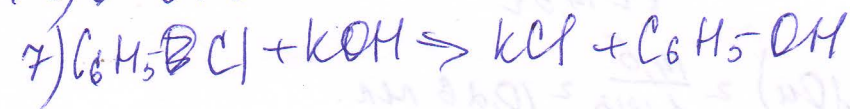
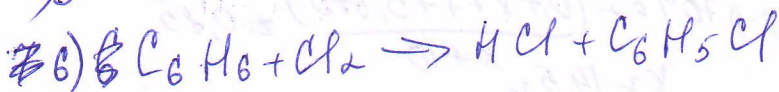
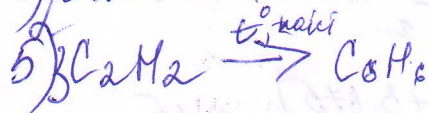
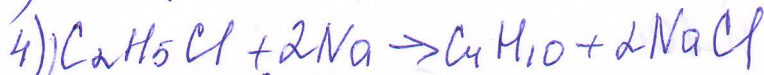
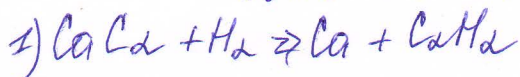
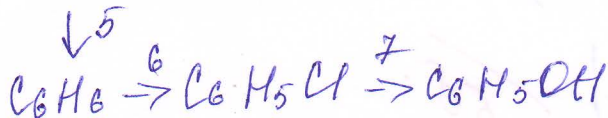
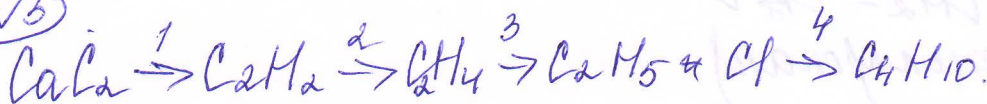
$$n = 4$$



ответ: $C_4 H_8$

58.

(W5)

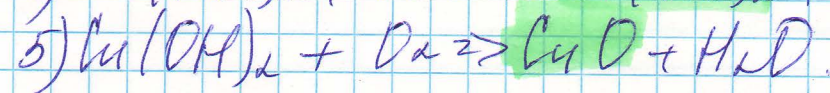
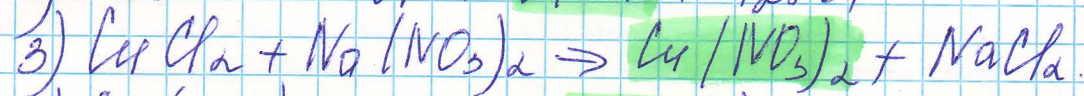
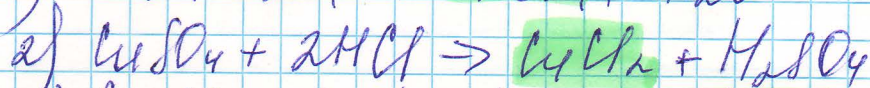
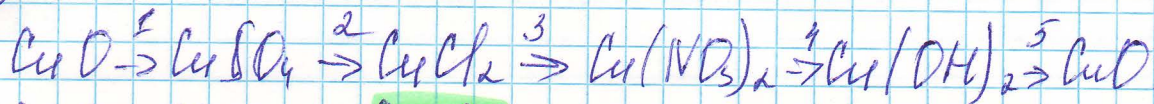


75.

$$\frac{240 \cdot + n \cdot 12 \cdot 60}{300}$$

Анализическая реакция.

(13)



60.