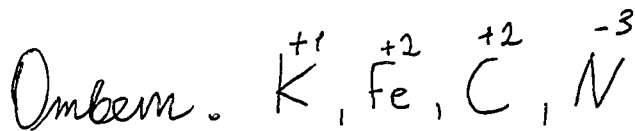


№ 1



№ 2

$$D(\text{возг}) = \frac{M_{\text{ср}}}{29} = 0,517 \quad M_{\text{ср}} = \frac{M_1 + M_2}{2}$$

$$M_{\text{ср}} = 0,517 \cdot 29 = 15 \frac{\text{г}}{\text{моль}} \Rightarrow \frac{M_1 + M_2}{2} = 15 \Rightarrow M_1 + M_2 = 15 \cdot 2 = 30 \frac{\text{г}}{\text{моль}}$$

Возможные лёгкие пары возможных газов

1) H₂ (M₁ = 2), N₂ (M₂ = 28) ⇒ 2 + 28 = 30 $\frac{\text{г}}{\text{моль}}$

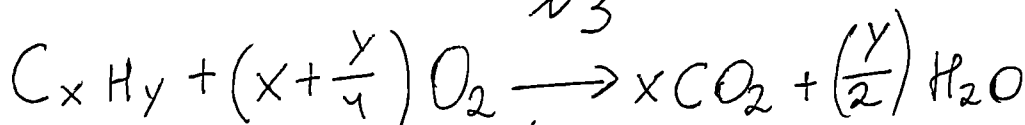
2) H₂ (M₁ = 2), CO (M₂ = 28) ⇒ 2 + 28 = 30 $\frac{\text{г}}{\text{моль}}$

3) He (M₁ = 4), C₂H₂ (M₂ = 26) ⇒ 4 + 26 = 30 $\frac{\text{г}}{\text{моль}}$

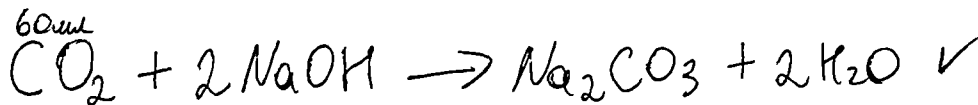
6

Ответ 1) H₂ и N₂, 2) H₂ и CO, 3) He и C₂H₂

№ 3



$$V(\text{ам}) = V(CO_2) + V(O_2) \quad V(CO_2) = 100 \text{ мл} - 40 \text{ мл} = 60 \text{ мл}$$



~~100 мл - 40 мл = 60 мл (V(CO₂))~~

$$\frac{V(C_x H_y)}{V(CO_2)} = \frac{1}{x} \Rightarrow \frac{20}{60} = \frac{1}{x} \Rightarrow x = \frac{60}{20} = 3 \checkmark$$

$$\frac{V(C_x H_y)}{V(O_2)} = \frac{1}{x + \frac{y}{4}} \Rightarrow \frac{V(C_x H_y)}{V(O_2)} = \frac{1}{3 + \frac{y}{4}}$$

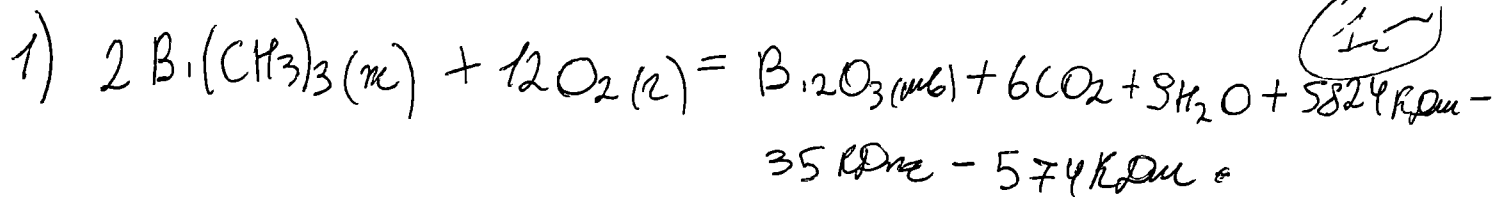
$$\frac{20}{100 \checkmark} = \frac{1}{3 + \frac{y}{4}} = 20 \cdot \left(3 + \frac{y}{4}\right) = 100 \Rightarrow 3 + \frac{y}{4} = \frac{100}{20}$$

$$3 + \frac{y}{4} = 5 \Rightarrow \frac{y}{4} = 2 \Rightarrow y = 8 \quad C_x H_y - C_3 H_8 \text{ газок}$$

Ответ $C_3 H_8$ (газок)

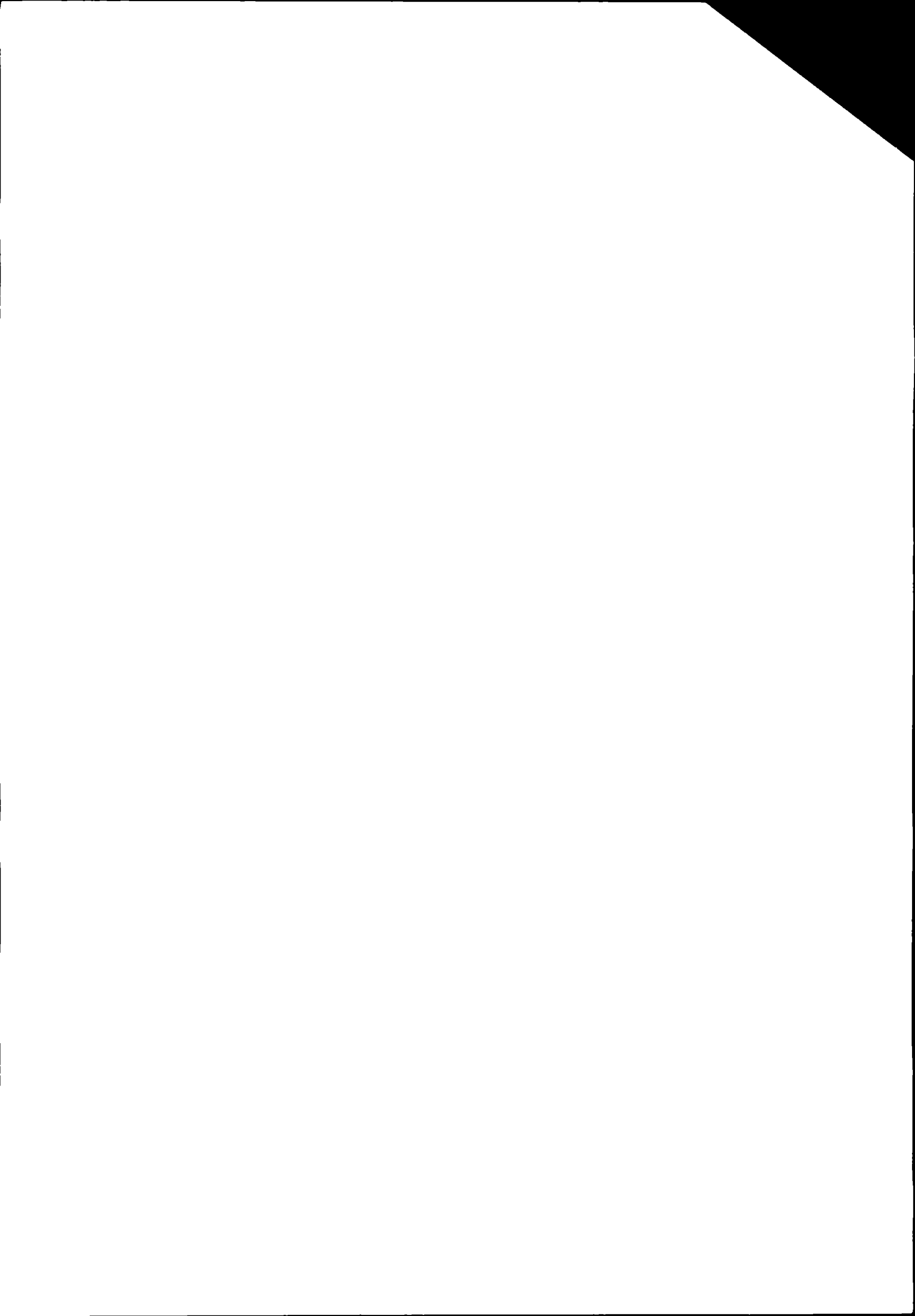
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Бланк ответов

Линия отреза



Линия отреза

Бланк ответов

