Subiectul B. ELEMENTE DE TERMODINAMICĂ

II.a.	$p_1V_1 = \nu_1 RT_1$ $\nu_1 = \frac{p_1V_1}{RT_1}$ Rezultat final: $\nu_1 = 0{,}6\,\text{mol}$
b.	$U_1 + U_2 = U'_1 + U'_2$ $\upsilon_1 C_v T_1 + \upsilon_2 C_v T_2 = \upsilon_1 C_v T + \upsilon_2 C_v T$ $\nu_2 = \frac{p_2V_2}{RT_2}$ Rezultat final $T \cong 309\,\text{K}$
c.	$p_2V_2 = \nu_2 RT_2$ $pV_1 = \nu'_1 RT$ $pV_2 = \nu'_2 RT$ $\nu_1 + \nu_2 = \nu'_1 + \nu'_2$ $p = \frac{p_1V_1 + p_2V_2}{V_1 + V_2}$ Rezultat final: $p = 2{,}42 \cdot 10^5\,\text{Pa}$
d.	$\nu_f = \frac{pV_1}{RT}$ Rezultat final: $\upsilon_f = 0{,}47\,\text{mol}$