

Subiectul B. ELEMENTE DE TERMODINAMICĂ

II.a.	$n = \frac{N}{V_1}$ $v = \frac{N}{N_A}, v = \frac{m}{\mu}$ Rezultat final: $n = 12,046 \cdot 10^{25} \text{ m}^{-3}$
b.	$p_1 V_1 = \frac{m}{\mu} RT_1$ $\frac{p_1}{V_1} = \frac{p_2}{V_2}$ $p_2 = \frac{V_2}{V_1} \cdot \frac{mRT_1}{\mu V_1}$ Rezultat final: $p_2 \cong 13,3 \cdot 10^5 \text{ Pa}$
c.	$p_2 V_2 = \frac{m}{\mu} RT_2$ Rezultat final: $T_2 = 1600 \text{ K}$
d.	$\rho_3 = \frac{m}{V_3}, V_3 = V_2$ Rezultat final: $\rho = 3,2 \text{ kg/m}^3$