

SUBIECTUL B. ELEMENTE DE TERMODINAMICĂ

II a.	$\mu = m_0 N_A$ Rezultat final: $m_0 = 4,6 \cdot 10^{-26} \text{ kg}$
b.	$p_A V_A = \frac{m}{\mu_{O_2}} R T_A$ $p_B V_B = \frac{m}{\mu_{N_2}} R T_B$ $\frac{p_A}{p_B} = \frac{\mu_{N_2}}{\mu_{O_2}} \cdot \frac{T_A}{T_B} \cdot \frac{V_B}{V_A}$ Rezultat final: $\frac{p_A}{p_B} = \frac{7}{12}$
c.	$\frac{p_A V_A}{T_A} = \frac{p'_A V'_A}{T}$ $\frac{p_B V_B}{T_B} = \frac{p'_B V'_B}{T}$ $p'_A = p'_B$ Rezultat final: $\frac{V'_A}{V'_B} = \frac{7}{8}$
d.	$\frac{2m}{\bar{\mu}} = \frac{m}{\mu_{N_2}} + \frac{m}{\mu_{O_2}}$ Rezultat final: $\bar{\mu} = 29,86 \text{ g/mol}$