

Subiectul B. ELEMENTE DE TERMODINAMICĂ

II.a.	$N_1 = \frac{m_1}{\mu_1} N_A$ <p>Rezultat final: $N_1 \approx 12 \cdot 10^{23}$ molecule de azot</p>
b.	$N_2 = \frac{V_{O_2}}{V_{\mu_0}} N_A$ <p>Rezultat final: $N_2 \approx 4 \cdot 10^{23}$ molecule oxigen</p>
c.	$m = m_1 + m_2 \Rightarrow v\mu = v_1\mu_1 + v_2\mu_2$ $\frac{N_1 + N_2}{N_A} \mu = \frac{N_1}{N_A} \mu_1 + \frac{N_2}{N_A} \mu_2$ $\mu = \frac{N_1\mu_1 + N_2\mu_2}{N_1 + N_2}$ <p>Rezultat final: $\mu = 29$ g/mol</p>
d.	$c_1 = \frac{m_1}{m_1 + m_2} = \frac{1}{1 + \frac{N_2\mu_2}{N_1\mu_1}}$ <p>$c_1 + c_2 = 1$ Rezultat final: $c_1 = 77,7\%$; $c_2 = 22,2\%$</p>