Subiectul B. ELEMENTE DE TERMODINAMICĂ

III. a.	$L_{12} = -0{,}375 \cdot p_1V_1$ Rezultat final: $L_{12} = -375\,\text{J}$
b.	$Q_{23} = \nu RT_2 \ln\dfrac{V_3}{V_2}$ $Q_{23} = 0{,}25p_1V_1 \ln 2$ Rezultat final: $Q_{23} = 173{,}25\,\text{J}$
c.	$\Delta U_{13} = \nu C_V (T_3 - T_1)$ $\Delta U_{13} = -1{,}875p_1V_1$ Rezultat final: $\Delta U_{13} = -1875\ \text{J}$
d.	$Q_{12} = \Delta U_{12} + L_{12}$ $\Delta U_{12} = \nu C_V (T_2 - T_1)$ $L = \dfrac{(p_1 + p_2)(V_2 - V_1)}{2}$ $Q = \upsilon C(T_2 - T_1)$ $C = C_V + \dfrac{R}{2}$ Rezultat final: $C = 24{,}93\,\text{J/mol} \cdot \text{K}$