## Subiectul B. ELEMENTE DE TERMODINAMICĂ

III.a.	$L_{1231} = -\frac{3}{2} p_1 V_1$
	Rezultat final: $L_{1231} = -6 \cdot 10^5 \text{ J}$
b.	$L_{1321} = -L_{1231}$
	Rezultat final: $L_{1321} = 6 \cdot 10^5 \text{ J}$
C.	$\Delta U_{23} = vC_V (T_3 - T_2)$
	$\Delta U_{23} = vC_V (T_3 - T_2)$ $\Delta U_{23} = \frac{15}{2} p_1 V_1$
	Rezultat final: $\Delta U_{23} = 3 \cdot 10^6 \text{ J}$
d.	$Q_{31} = \Delta U_{31} + L_{31}$
	$\Delta U_{31} = \frac{5(p_1 V_1 - p_3 V_3)}{2}$
	$Q_{31} = \Delta U_{31} + L_{31}$ $\Delta U_{31} = \frac{5(p_1 V_1 - p_3 V_3)}{2}$ $L_{31} = \frac{(p_1 + p_3) \cdot (V_1 - V_3)}{2}$
	Rezultat final: $Q_{31} = -58 \cdot 10^5 J$