

Subiectul B. ELEMENTE DE TERMODINAMICĂ

III.a.	1-2 – proces adiabatic 2-3 – proces izocor 3-4 – proces adiabatic 4-1 – proces izocor
b.	$U_2 = \nu C_V T_2$ $\Delta U_{12} = -L_{12}$ $U_2 = U_1 - L_{12}$ Rezultat final: $U_2 = 24,93 \text{ kJ}$
c.	$Q_{23} = \nu C_V (T_3 - T_2)$ $T_2 = \frac{U_2}{\nu C_V}$ $\frac{p_2}{T_2} = \frac{p_3}{T_3}$ Rezultat final: $Q_{23} = 49,86 \text{ kJ}$
d.	$\frac{Q_{23}}{Q_{41}} = \frac{\nu C_V (T_3 - T_2)}{\nu C_V (T_1 - T_4)} = \frac{T_3 - T_2}{T_1 - T_4}$ Rezultat final: $T_4 = 900 \text{ K}$