

Subiectul B. ELEMENTE DE TERMODINAMICĂ

III.a.	$p_1 = p_2$ $\frac{p_1 V_1}{T_1} = \frac{p_2 V_2}{T_2}$ Rezultat final: $\frac{T_1}{T_2} = 2$
b.	$\frac{U_3}{U_1} = \frac{\nu C_V T_3}{\nu C_V T_1}$ $\frac{T_3}{T_1} = \frac{p_3}{p_2} = 2$ Rezultat final: $\frac{U_3}{U_2} = 2$
c.	$Q_{23} = \nu C_{23} (T_3 - T_2)$ $\Delta U_{23} = \nu C_V (T_3 - T_2)$ $\frac{Q_{23}}{\Delta U_{23}} = \frac{C_{23}}{C_V}$ $\gamma = \frac{C_V + R}{C_V} \Rightarrow C_V = \frac{3R}{2}$ Rezultat final: $\frac{Q_{23}}{\Delta U_{23}} = \frac{4}{3}$
d.	$\frac{L_{12}}{L_{34}} = \frac{p_2 (V_2 - V_1)}{p_3 (V_2 - V_1)}$ Rezultat final: $\frac{L_{12}}{L_{34}} = \frac{1}{2}$