

**Subiectul B. ELEMENTE DE TERMODINAMICĂ**

<b>III.a.</b>	Reprezentare corectă
<b>b.</b>	$\gamma = \frac{C_V + R}{C_V} \Rightarrow C_V = \frac{5R}{2}$ $\Delta U_{12} = \nu C_V (T_2 - T_1)$ Rezultat final: $\Delta U_{12} = -5000 \text{ J}$
<b>c.</b>	$L_{12} = p_1(V_2 - V_1)$ $\frac{V_1}{T_1} = \frac{V_2}{T_2}$ $L_{12} = -\frac{2}{3} p_1 V_1$ Rezultat final: $L_{12} = -2000 \text{ J}$
<b>d.</b>	$Q_{pr} = Q_{23} + Q_{31}$ $Q_{pr} = \nu R T_2 \ln \frac{V_1}{V_2} + \frac{5}{2} \nu R (T_1 - T_2)$ Rezultat final: $Q_{pr} = 6100 \text{ J}$