## Subjectul B. ELEMENTE DE TERMODINAMICĂ

III. a.	
	$\frac{p_2}{p_1} = \frac{p_3}{p_2} = 2$ , $\frac{p_4}{p_3} = \frac{1}{4}$ , $\frac{p_1}{p_4} = 1$
	$\mu_1$ $\mu_2$ $\mu_3$ 4 $\mu_4$
b.	
	$Q_{41} = -\nu C_V \cdot 2T$
	$Q_{23} = vC_V \cdot 2T$
	Rezultat final: $Q_{41} = -150 \text{ J}$
C.	
	$L_{12} = \nu R \cdot T \ln 3$
	$L_{12} = vR \cdot T \ln 3$ $L_{34} = vR \cdot 3T \ln \frac{1}{3}$
	Rezultat final: $x = \frac{L_{12}}{L_{34}} = -\frac{1}{3}$
d.	
	$\Delta U_{23} = vC_V \cdot 2T$
	$\Delta U_{41} = -vC_V \cdot 2T$
	Rezultat final: $y = \frac{\Delta U_{23}}{\Delta U_{41}} = -1$