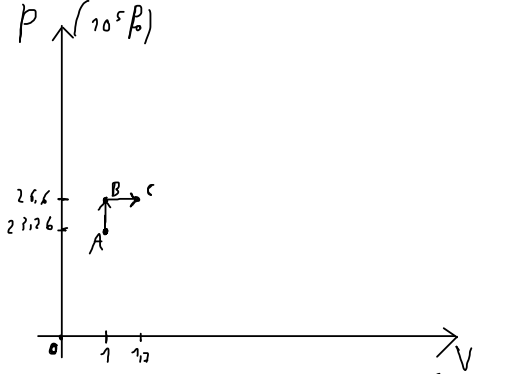
DATI

$n = 1\ mol$ - gas perfetto

$V_0 = 1 \cdot 10^{-3}\ m^3$ $\quad T_0 = 280\ °K$



- T. isocora $V = cost.$

$T_1 = 320\ °K$

- T. isobara $P = cost.$

$V_1 = 1,7 \cdot 10^{-3}\ m^3$

$L = ?$

	(10^5 Pa)	(10^{-3} m^3)	(K)	
mol	P	V	T	
A	23,26	1	280	
B	26,6	1	320	
C	26,6	1,7	599	

- Stato A

$P_0 V_0 = nRT_0 \qquad P_0 = \frac{nRT_0}{V_0} = \frac{1 \cdot 8,31 \cdot 280}{1 \cdot 10^{-3}} = 23,26 \cdot 10^5\ Pa$

- Stato B

$\frac{P_0}{T_0} = \frac{P_1}{T_1} \qquad P_1 = \frac{P_0 T_1}{T_0} = \frac{2326 \cdot 10^5 \cdot 320}{280} = 26,6 \cdot 10^5\ Pa$

- Stato C

$\frac{V_1}{T_1} = \frac{V_2}{T_2} \qquad T_2 = \frac{V_2 T_1}{V_1} = \frac{1,7 \cdot 10^{-3} \cdot 320}{1 \cdot 10^{-3}} = 599\ °K$

- LAVORO

$L = L_{A \to B} + L_{B \to C} = 0 + P \Delta V = 26,6 \cdot 10^5 [(1,7 - 1) \cdot 10^{-3}] = 1862\ J$