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FISICA

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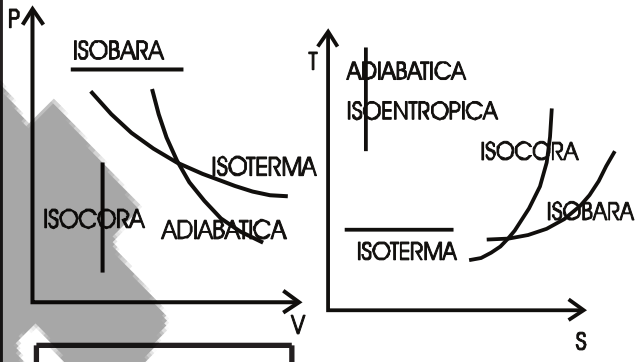
	PV=nRT	$W_{1\to 2}=\int_1^2 PdV$
ISOBARA P=cte	$\frac{V_1}{T_1}=\frac{V_2}{T_2}$	$W_{1\to 2}=P_1(V_2-V_1)$
ISOCORA V=cte	$\frac{P_1}{T_1}=\frac{P_2}{T_2}$	$W_{1\to 2}=0$
ISOTERMA T=cte	$P_1V_1=P_2V_2$	$W_{1\to 2}=nRT_1\ln\frac{V_2}{V_1}$
ADIABATICA $\Delta Q=0$	$P_1V_1^{\gamma}=P_2V_2^{\gamma}$ $T_1V_1^{\gamma-1}=T_2V_2^{\gamma-1}$ $T_1^{\gamma}P_1^{1-\gamma}=T_2^{\gamma}P_2^{1-\gamma}$	$W_{1\to 2}=\frac{P_1V_1-P_2V_2}{\gamma-1}$ $=-nC_V(T_2-T_1)$



$R=8{,}31\frac{\text{Julios}}{\text{mol K}}$

$R=0{,}082\frac{\text{atm l}}{\text{mol K}}$

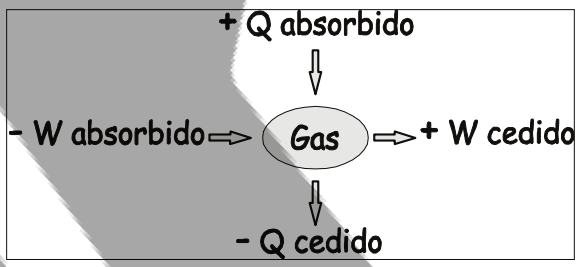
$R=2\frac{\text{cal}}{\text{mol K}}$

$R=C_P-C_V$

$\gamma=\frac{C_P}{C_V}$

ENERGIA INTERNA	CALOR	ENTALPIA	ENTROPIA
$U_{1\to 2}=nC_V(T_2-T_1)$	$Q_{1\to 2}=U_{1\to 2}+W_{1\to 2}$	$H_{1\to 2}=nC_P(T_2-T_1)$	$S_{1\to 2}=nC_V\ln\frac{T_2}{T_1}+nR\ln\frac{V_2}{V_1}$

GASES MONOATOMICOS	GASES DIATOMICOS
$C_V=\frac{3}{2}R$	$C_V=\frac{5}{2}R$
$C_P=\frac{5}{2}R$	$C_P=\frac{7}{2}R$



	PRESION	VOLUMEN	TEMPERATURA	W,U,Q,H	R,C_p,C_V	S
SISTEMA INTERNACIONAL	$\frac{N}{m^2}=Pa$	m^3	K	J	$\frac{\text{Julios}}{\text{mol K}}$	$\frac{J}{K}$
SISTEMA QUIMICO	atm	l	K	atm·l	$\frac{\text{atm l}}{\text{mol K}}$	$\frac{\text{atm}\cdot\text{l}}{K}$
SISTEMA CALORIFICO			K	cal	$\frac{\text{cal}}{\text{mol K}}$	$\frac{\text{cal}}{K}$
	$1atm=1{,}013\cdot10^5Pa$	$1m^3=10^3l$	$T(K)=T(C)+273$	$1J=0{,}24cal$		