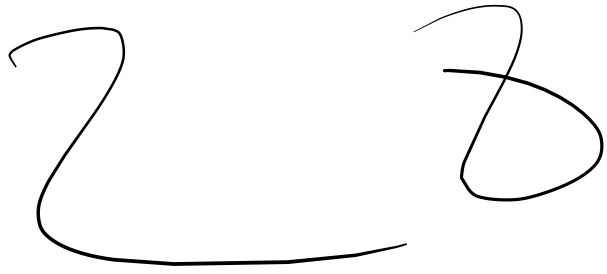
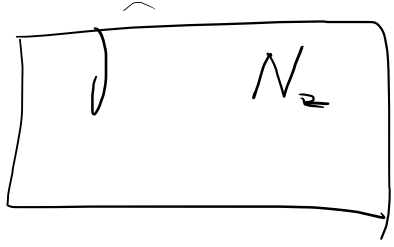


$v_1 \quad v_2 \quad v_3$

$i = 5$



$$\frac{\bar{v}_1^2 + \bar{v}_2^2 + \bar{v}_3^2}{3} = v_{cpM}^2$$

$\bar{v}_M = 400\,c$

$$\bar{v} = \sqrt{\frac{3RT}{\mu}} = \sqrt{\frac{3kT}{m_0}}$$

$$U = \frac{i}{2}\nu RT = \frac{5}{2}\nu RT$$

$i = 5$

$$RT = \frac{2}{5}\frac{U}{\nu}$$

$$\overline{v}_{qp}^2 = \frac{3RT}{\mu} = \frac{3 \cdot 2}{5}\frac{U}{\mu}$$

$\mu = 14 \frac{г}{моль}$

$$U = \frac{\overline{v}_{qp}^2 \cdot \mu \cdot 5}{6}$$

ν - ?

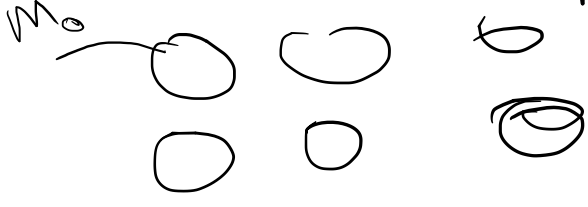
$14 \cdot 10^{-3} \frac{кг}{моль}$

$m_0 = 7$

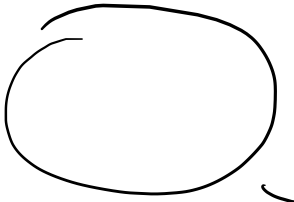
μ $\frac{m_2}{m_0 \cdot m_b}$

$\frac{M}{T}$ $N = 12$ $n = 2$

$N = 6$



$m_0 \cdot 6 = \mu = 0.52$



$m_0 = ?$

$\mu =$

$$m_0 = \frac{\mu}{N_A}$$

$$N_A = 6{,}022 \cdot 10^{23}$$

0 - яйцо

m_0 - масса яйца

дюжина

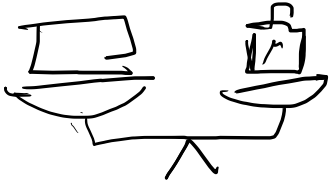
11

сколько? = x 12 яиц

моль.

сколько: $N_A \approx 6 \cdot 10^{23}$

μ - масса 12 моля.



Масса дюжины = μ

μ = [кг/дюжину]

$m_0 \cdot 12 = \mu$

$m_0 \cdot N_A = \mu$

Нормальные условия: $+20^{\circ}C$

$300\,K$

$P = 1$ атм

1 атм. = 101 325 Па $= 760$ мм рт. ст.

$\approx 10^5$ Па

Стандартные условия

$273^\circ K \quad 0^\circ C = T$

10^5 Па $= P$

V

$PV = nRT$

$V \sim n$

$m \sim n$

$m = M \cdot n$

$V = V_m \cdot n$

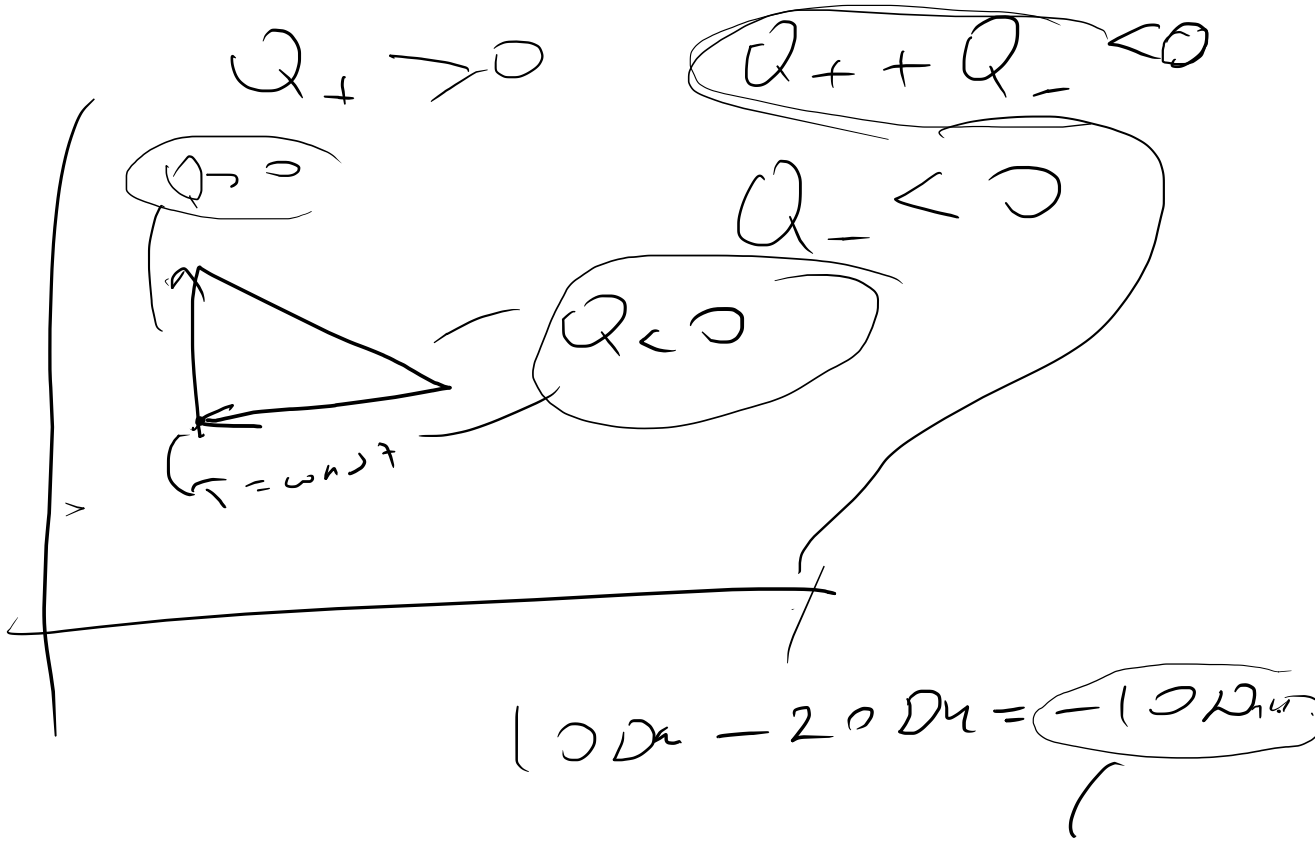
C.T.P.

$V = V_m \cdot n$

22.4 L/mol

$$\frac{V_2}{V_1} = \frac{T_2}{T_1}$$

$$PV = nRT$$


$Q_+ > 0$
$Q_+ + Q_- < 0$
$Q > 0$
$Q_- < 0$
$Q < 0$
$\tau = \omega n J$
$10 D_H - 20 D_H = -10 \Omega_H$

1-2-3 7.

$Q_+ + Q_-$

$Q = Q + A = A_{12} + A_{23}$

$Q_+ + Q_- = A_2$

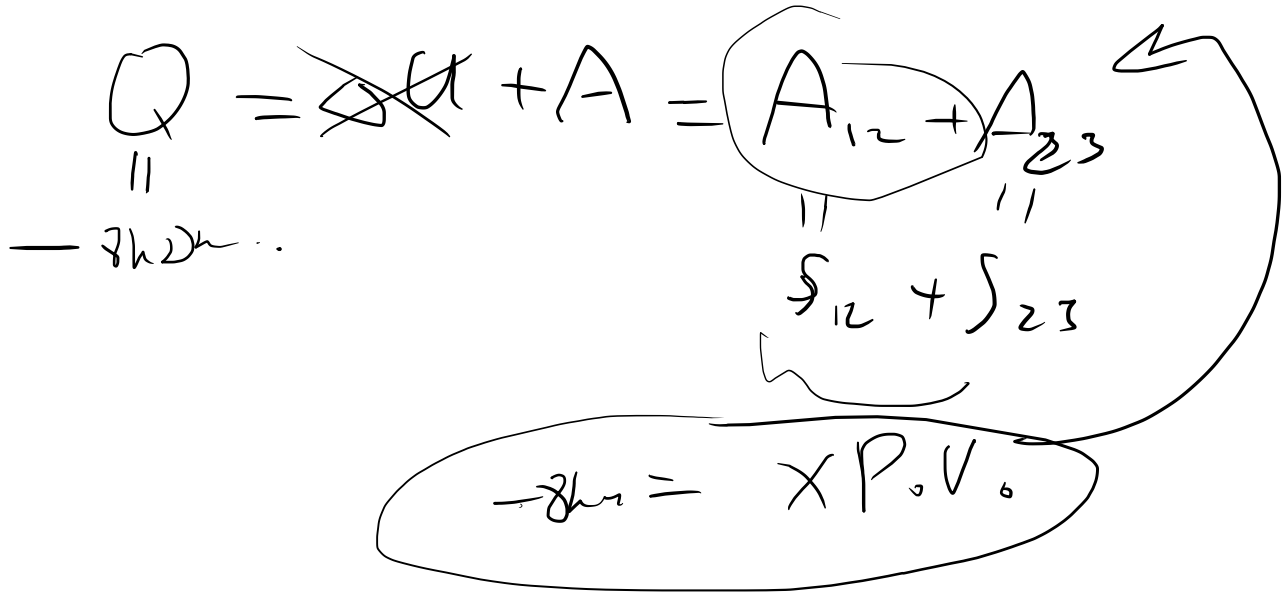
$Q = A_{12} + A_{23}$

$Q = A_{\Sigma 2}$

$= A_2 + A_{12} + A_{23}$

$Q = \chi P_0 V_0$

$Q - A_{23} = A_{12}$


Q = ΔU + A = A12 + A23
Q
ΔU
A
A12
A23
— 热力学...
S12 + S23
— 热力学 = XP.V.