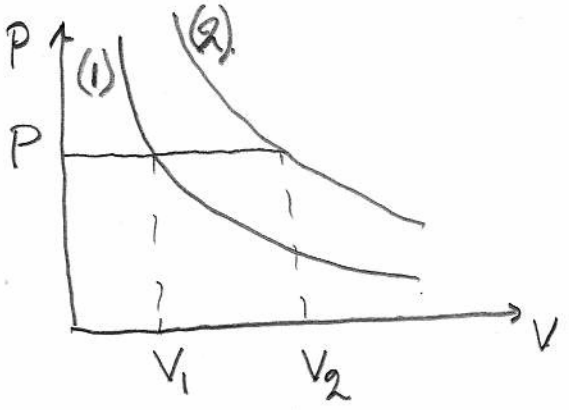
Απαντήσεις Β' Λυκείου κατευθύνσεις

A_1 – δ
A_2 – β
A_3 – β
A_4 – β

A_5 – Σ, Λ, Σ, Σ, Λ

B1.



$PV_1 = n_1 RT \Rightarrow \frac{V_1}{V_2} = \frac{n_1}{n_2} \Rightarrow$

$PV_2 = n_2 RT$

$n_2 > n_1$

σωστό το (γ).

B2 $F_{κεντρ} = \frac{mv^2}{R} \Longrightarrow F'_{κεν} = \frac{mv'^2}{R} = \frac{m(2v)^2}{R} = 4\frac{mv^2}{R} = 4F_{κεντρ}$.

σωστό το (α).

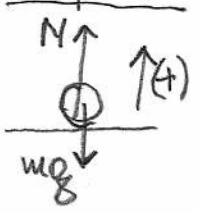
Θέμα Γ.

A. $P_{αερων} = P_{atm} + \frac{W}{A} = 1{,}2 \cdot 10^5 \frac{N}{m^2}$.

B. $\frac{V_1}{T_1} = \frac{V_2}{T_2} \Rightarrow T_2 = T_1 \cdot \frac{V_2}{V_1} = T_1 \cdot \frac{Ah_2}{Ah_1} = 4T_1 = 1200K$

Γ. $\frac{v_{εν_1}}{v_{εν_2}} = \frac{\sqrt{\frac{3T_1}{M_r}}}{\sqrt{\frac{3T_2}{M_r}}} = \sqrt{\frac{T_1}{T_2}} = \sqrt{\frac{300}{1200}} = \frac{1}{2} \Rightarrow v_{εν_2} = 600\ m/s$.

Θέμα Δ



A. $P = mv = 0{,}1 \cdot 10 = 1\ kgm/s$

$P' = mv' = 0{,}1 \cdot 8 = 0{,}8\ kgm/s$.

B. $\Delta P = P' - P = 0{,}8 - (-1) = 1{,}8\ kgm/s$.

Γ. $\Sigma F = \frac{\Delta P}{\Delta t} \Rightarrow N - mg = \frac{\Delta P}{\Delta t} \Rightarrow$

$N = mg + \frac{\Delta P}{\Delta t} = 1 + 18 = 19\ N$.