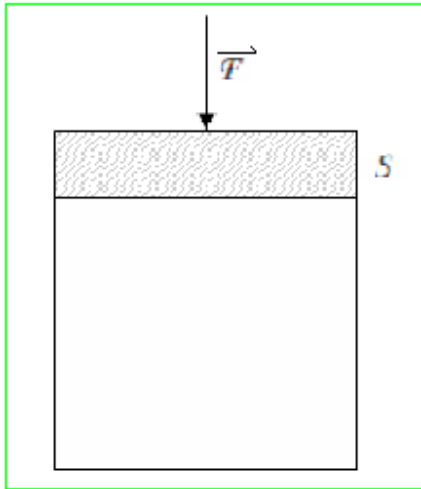


# Boyle-MariotteV Zakon



$$p = \frac{F}{S}$$

$$\left. \begin{array}{l} p \uparrow \cdot v \downarrow \\ p \downarrow \cdot v \uparrow \end{array} \right\} p \propto \frac{1}{v} \Rightarrow p v = \text{KONSTANTEN}$$

$$\Downarrow$$

$$p_1 v_1 = p_2 v_2$$

$$\begin{aligned} m &= \rho_1 \cdot V_1 = \rho_2 \cdot V_2 \\ V_1 &= m / \rho_1; V_2 = m / \rho_2 \\ p_1 \cdot V_1 &= p_2 \cdot V_2 \\ &\rightarrow \\ p_1 \cdot (m / \rho_1) &= p_2 \cdot (m / \rho_2) \\ p_1 / \rho_1 &= p_2 / \rho_2 \\ p_1 / \rho_1 &= \text{konstantno} \rightarrow p ? \rho \end{aligned}$$

$$\begin{aligned} p \cdot v &= (m/M) \cdot R \cdot T \quad | \cdot v \\ p &= (m/v) \cdot (R/M) \\ p &= \rho \cdot (R/M) \\ &\rightarrow \\ \rho &= (pM) / (RT) \end{aligned}$$

