

41.) $W_g = 200 \text{ J}$ $p = \text{all}$
 $K = 1,4$ $Q = ?$

$$K = \frac{C_p}{C_v} = \frac{C_{MP}}{C_{MV}} = \frac{f+2}{f}$$

$$\Delta E_b = Q + W \quad W_g = -W$$

$$\Delta E_b = \frac{f}{2} n R \Delta T \quad pV = nRT$$

$$p = \text{all}: W = -p \Delta V$$

Adiabatus kiterő $\rightarrow f$

$$K = \frac{f+2}{f} \rightarrow \underline{f}$$

Hőtan I. főtétele: $\Delta E_b = Q + W$

$$\Delta E_b = Q - W_g$$

$$\frac{f}{2} n R \Delta T = Q - p \Delta V$$

$$\frac{f}{2} p \Delta V = Q - p \Delta V$$

$$\left(\frac{f}{2} + 1\right) p \Delta V = Q$$

$$Q = \left(\frac{f}{2} + 1\right) W_g = \dots = \underline{\underline{700 \text{ J}}}$$

$$pV = nRT \quad \rightarrow$$

$$p \Delta V = nR \Delta T \quad \leftarrow$$