

2022. 6.

6.1.

$$\frac{W_1}{W_2} = \frac{3p_1 \cdot 2V_1}{2p_1 \cdot 2V_1} = \frac{6p_1V_1}{4p_1V_1} = \frac{3}{2}$$

$$pV = nRT$$
$$T = \frac{pV}{nR}$$

6.2.

$$\Delta T_1 = T_2 - T_1 = \frac{3p_1V_1}{nR} - \frac{2p_1V_1}{nR} = \frac{4p_1V_1}{nR} = \Delta T_2 = \Delta T$$

~~Q~~

~~Q~~

$$\Delta U_1 = Q + 6p_1V_1$$

$$\Delta U_2 = Q + 4p_1V_1$$

$$\Delta U_2 > \Delta U_1$$

B2