



 $W = nRT, \int \frac{dV}{V} = \int h(V) \frac{V}{V_i} RRT_i = nRT_i h_i \left(\frac{V_R}{V_i}\right) = -4.32 \times 10^{54}$ 

C) RV=nRT

 $\bigcirc$ 

 $= \frac{nRT_{i}}{N} dV$ 

 $T_{D} = \frac{P_{f}V_{g}}{nR} = \frac{P_{i}V_{f}}{nR} = \frac{nRT_{i}V_{f}}{V_{i}nR} = \frac{V_{f}T_{i}}{V_{i}} = \frac{1}{2}T_{i} = \frac{1}{2}\cdot 300 \text{ K} = 150 \text{ K}$ 



