

Démo. Laplace Parente

$$1 = \frac{P_f V_f^\gamma}{P_i V_i^\gamma} \Leftrightarrow P_i V_i^\gamma = P_f V_f^\gamma$$

$$\Leftrightarrow PV^\gamma = \text{cte}$$

$$PV = nRT$$

$$\Leftrightarrow P = \frac{nRT}{V}$$

$$\Leftrightarrow nRT \frac{V^\gamma}{V} = \text{cte}$$

$$\Leftrightarrow TV^{\gamma-1} = \text{cte}$$

$$\Leftrightarrow P \left(\frac{nRT}{P} \right)^\gamma = \text{cte}$$

$$\Leftrightarrow P^{1-\gamma} \cdot T^\gamma = \text{cte}$$

$$V = \frac{nRT}{P}$$