

Dokaz Avogadroho zákona

$$pV = \frac{1}{3} N m \bar{v}^2$$

$$\frac{1}{2} m \bar{v}^2 = \frac{3}{2} kT \quad \Rightarrow$$

$$pV = \frac{2}{3} N \frac{3}{2} kT$$

$$pV = NkT$$

$$p_1 V_1 = N_1 k T_1$$

$$p_2 V_2 = N_2 k T_2$$

$$\text{Ak } p_1 = p_2 \quad V_1 = V_2 \quad \text{a } T_1 = T_2 \quad \Rightarrow$$

$$N_1 = N_2$$