

Jméno a příjmení:

převody jednotek:

$$3 \text{ kg m}^{-3} = 0,003 \text{ kg dm}^{-3}$$

$$140 \text{ mm}^2 \text{ g}^{-1} = 140 \cdot 10^{-9} \text{ m}^2 \text{ kg}^{-1}$$

$$1,3 \cdot 10^4 \text{ Pa} = 13 \text{ kPa}$$

$$22 \text{ kJ mol}^{-1} \text{ K}^{-1} = 22000 \text{ J mol}^{-1} \text{ K}^{-1}$$

$$6 \text{ MJ mol}^{-1} = 1434 \text{ kcal mol}^{-1}$$

$$3,5 \cdot 10^5 \text{ dm}^4 = 35 \text{ m}^4$$

matematika:

$$\int_4^{13} \frac{5}{V-1} dV = 5 [\ln(V-1)]_4^{13} = 6,9315$$
$$\int_{300}^{350} \left(45 + \frac{2}{T^2} - \frac{50}{T^3} \right) dT = \left[45T - \frac{2}{T} + \frac{100}{T^2} \right]_{300}^{350} = 2250$$
$$\frac{\partial}{\partial T} \left(13T^2 - 4e^{-5/T} \right) = 26T - 4e^{-5/T} \frac{5}{T^2}$$
$$\ln p = A - \frac{B}{\Delta H}, \quad \Delta H = \frac{B}{A - \ln p}$$