

Jméno a příjmení:

převody jednotek:

$$\text{pro ethan : } 52,5 \text{ J K}^{-1} \text{ mol}^{-1} = 1,575 \text{ J K}^{-1} \text{ kg}^{-1}$$

$$12 \text{ bar} = 12 \cdot 10^5 \text{ Pa}$$

$$62,6 \text{ g mol}^{-1} = 0,0626 \text{ kg mol}^{-1}$$

matematika:

$$K = K(x, y, p), \quad dK = \left(\frac{\partial K}{\partial x} \right)_{y,p} dx + \left(\frac{\partial K}{\partial y} \right)_{x,p} dy + \left(\frac{\partial K}{\partial p} \right)_{x,y} dp$$

$$p = A + \ln \frac{T_2}{T_1}, \quad T_2 = T_1 e^{p-A}$$

$$\frac{\partial^2}{\partial D^2} (5D^2 - C e^{D/4C}) = 10 - \frac{1}{16C} e^{D/4C}$$

$$\int_3^6 \left(12 + \frac{7}{T} \right) dT = 36 + \ln 128$$

$$\int_{290}^{270} (8T + 12) dT = -45040$$