

Jméno a příjmení:

převody jednotek:

$$2 \text{ kcal} = 8,368 \text{ J}$$

$$150 \text{ mmol l}^{-1} = 0,15 \text{ mol l}^{-1}$$

$$1034 \text{ hPa} = 0,1034 \text{ MPa}$$

$$5 \text{ kWh} = 18000 \text{ kJ}$$

$$4 \mu\text{m}^2 = 4 \cdot 10^{-12} \text{ m}^2$$

matematika:

$$\int \frac{1}{x} = \ln x + C$$

$$\int \frac{3}{x^2} = -\frac{3}{x} + C$$

$$\int \frac{3}{V-a} = 3 \ln(V-a) + C$$

$$\begin{aligned} \int_2^7 \frac{4}{V^2-2} &= \int_2^7 \frac{4}{(V-\sqrt{2})(V+\sqrt{2})} dV = \\ &= \left[\frac{2}{\sqrt{2}} \ln \left(\frac{V-\sqrt{2}}{V+\sqrt{2}} \right) \right]_2^7 = 1,9135 \end{aligned}$$

$$\frac{d}{dG} \left(1 + \frac{30}{G} - \frac{50}{G^2} + \frac{122}{G^3} \right) = -\frac{15}{G^2} + \frac{100}{G^3} - \frac{366}{G^4}$$