

# Formule pri predmetu Gradbena fizika

**Te (in še kakšne, odvisno od nalog) bodo napisane ob nalogah pri preverjanju znanja:**

Vse snovne konstante (razen gostote vode) in naravne konstante bodo napisane.

$$\chi \equiv \frac{\lambda}{\rho c_p}$$

$$j = \frac{\sigma (T_1^4 - T_2^4)}{\frac{1}{\epsilon_1} + \frac{1}{\epsilon_2} - 1}$$

$$pV = \frac{m}{M} RT, R = 8300 \text{ J K}^{-1} \text{ kmol}^{-1}$$

$$j = A \cdot \frac{\Delta p_v}{\mu L}, A = 0,622 \frac{\text{g}}{\text{kPa m h}}$$

---

**Ne bo napisano, potrebno si je zapomniti:**

Prenos toplote

$$Q = Pt$$

$$q = P/S$$

$$q = \frac{\lambda \Delta T}{d} = \frac{\Delta T}{R}$$

$$R = \sum R_i$$

$$q = h \Delta T_{\text{m.p.}}$$

$$q = U \Delta T$$

$$\tau = \frac{L^2}{\chi} \text{ (ni težko ugotoviti, ko premislimo o enotah)}$$

$$Q = mc \Delta T$$

Sevanje

$$P = e S \sigma T^4$$

Vlažnost

Definicija relativne in absolutne vlažnosti.

Osvetljenost (fotometrija):

$$j = \frac{P}{4\pi r^2} = \frac{I}{r^2}$$

$$E = j' = j_0 \cos \varphi = \frac{I}{r^2} \cos \varphi$$

Zvok:

$$L = 10 \text{ dB} \log \left( \frac{I}{I_{\min}} \right) \text{ (} I_{\min} = 10^{-12} \text{ W m}^{-2} \text{, bo napisan)}$$