

ΕΝΔΕΙΚΤΙΚΕΣ ΑΠΑΝΤΗΣΕΙΣ

ΘΕΜΑ 4°

4.1

$$\begin{aligned} E &= N \cdot \frac{\Delta \Phi}{\Delta t} \Rightarrow E = N \cdot \frac{\Phi_2 - \Phi_1}{t_2 - t_1} \Rightarrow E = 10 \cdot \frac{0,005 \text{Wb} - 0,001 \text{Wb}}{0,3 \text{s} - 0,1 \text{s}} \Rightarrow \\ &\Rightarrow E = 10 \cdot \frac{0,004 \text{Wb}}{0,2 \text{s}} \Rightarrow E = 0,2 \text{V} \end{aligned}$$

$$\mathbf{4.2} \quad \Phi_1 = B_1 \cdot S \Rightarrow B_1 = \frac{\Phi_1}{S} \Rightarrow B_1 = \frac{0,001 \text{Wb}}{0,0001 \text{m}^2} \Rightarrow B_1 = 10 \text{T}$$

$$\mathbf{4.3} \quad \Phi_2 = B_2 \cdot S \Rightarrow B_2 = \frac{\Phi_2}{S} \Rightarrow B_2 = \frac{0,005 \text{Wb}}{0,0001 \text{m}^2} \Rightarrow B_2 = 50 \text{T}$$