

### ΕΝΔΕΙΚΤΙΚΕΣ ΑΠΑΝΤΗΣΕΙΣ

$$\alpha) \sigma_{\varepsilon\pi} = \frac{\sigma_{\theta\rho}}{\nu} \Rightarrow \sigma_{\theta\rho} = \sigma_{\varepsilon\pi} \cdot \nu \Rightarrow \sigma_{\theta\rho} = 1000 \text{ daN/cm}^2 \cdot 2 \Rightarrow \sigma_{\theta\rho} = 2000 \text{ daN/cm}^2$$

$$\beta) \sigma_{\theta\rho} = \frac{F_{\theta\rho}}{A} \Rightarrow F_{\theta\rho} = \sigma_{\theta\rho} \cdot A \Rightarrow 8000 \text{ daN} = 2000 \frac{\text{daN}}{\text{cm}^2} \cdot A \Rightarrow A = \frac{8000 \text{ daN}}{2000 \frac{\text{daN}}{\text{cm}^2}} \Rightarrow A = 4 \text{ cm}^2$$

$$A = \alpha^2 \Rightarrow \sqrt{A} = \sqrt{\alpha^2} \Rightarrow \sqrt{4} = \alpha \Rightarrow \alpha = 2 \text{ cm}$$