

## Απαντήσεις

### ΦΕ: Όγκος - Πυκνότητα

1. i.γ ii.α iii.γ iv.α vi.β

2. i.Λ ii.Σ iii. Λ iv.Λ v.Σ

3. i.  $89,6 \text{ ml} = \frac{89,6}{1000} \ell = 0,0896 \ell$

ii.  $0,27 \text{ mm}^3 = \frac{0,27}{1000} \text{ cm}^3 = 0,00027 \text{ cm}^3$

iii.  $670 \text{ m}^3 = 670 \cdot 1000000 \text{ cm}^3 = 67.0000.000 \text{ cm}^3$

iv.  $4,23 \ell = 4,23 \cdot 1000 \text{ ml} = 4230 \text{ ml}$

4.  $V_{\text{κυβ.}} = a^3 = (2 \text{ m})^3 = 8 \text{ m}^3$

$$V_{\text{ορθ. παρ.}} = a \cdot \beta \cdot \gamma = (5 \text{ cm}) \cdot (2 \text{ cm}) \cdot (3 \text{ cm}) = 30 \text{ cm}^3 = \frac{30}{1000000} \text{ m}^3 = 0,000030 \text{ m}^3$$

5.  $2 \frac{\text{g}}{\text{cm}^3} = 2 \frac{\frac{1}{1000} \text{ kg}}{\frac{1}{1000000} \text{ m}^3} = 2 \frac{1000000}{1000} \frac{\text{kg}}{\text{m}^3} = 2 \cdot 1000 \frac{\text{kg}}{\text{m}^3} = 2000 \frac{\text{kg}}{\text{m}^3}$

6. (α)  $m_A < m_B$ , (β)  $V_A < V_B$ , (γ)  $\rho_A = \rho_B$

7.  $m = 2 \text{ kg}$  και  $V = 4 \text{ m}^3$ .

Η πυκνότητα είναι:

$$\rho = \frac{m}{V} = \frac{2 \text{ kg}}{4 \text{ m}^3} = 0,5 \frac{\text{kg}}{\text{m}^3}$$

8. (α)  $V = V_{\text{τελ.}} - V_{\text{αρχ.}} = 150 \text{ ml} - 100 \text{ ml} = 50 \text{ ml} = 50 \text{ cm}^3$ .

(β)  $\rho = \frac{m}{V} = \frac{75 \text{ g}}{50 \text{ cm}^3} = 1,5 \frac{\text{g}}{\text{cm}^3}$ .