

Assu. 1.40)

$$\rho = d = \frac{m}{V}$$

$$a) V = 84 \text{ cm}^3$$

$$m = 210 \text{ g}$$

$$\rho = \frac{210}{84} = 2,5 \text{ g/cm}^3$$

$$\text{h} \quad \rho = 2,5 \cdot 1000 = 2.500 \text{ Kg/m}^3$$

$$1 \text{ g/cm}^3 = 1.000 \text{ Kg/m}^3$$

b)

$$V_1 = ?$$

$$m_1 = 624 \text{ g}$$

$$\rho_1 = 7,8 \text{ g/cm}^3$$

$$\rho_1 = \frac{m_1}{V_1} \Rightarrow \frac{7,8}{1} \times \frac{624}{V_1} \Rightarrow$$

$$\frac{7,8 \cdot V_1}{7,8} = \frac{624}{7,8} \Rightarrow V_1 = 80 \text{ cm}^3$$

$$\text{Ap} \propto V_1 < V$$

Αδ. 1.41

$$d_{\text{υγρ}} = 0,8 \text{ g/cm}^3$$

$$V_{\text{υγρ}} = 500 \text{ cm}^3$$

$$\alpha) d_{\text{υγρ}} = \frac{m_{\text{υγρ}}}{V_{\text{υγρ}}} \Rightarrow$$

$$0,8 = \frac{m_{\text{υγρ}}}{\frac{1}{1} \times 500} \Rightarrow m_{\text{υγρ}} = 400 \text{ g}$$

β)

$$M_{\text{νερ}} = 400 \text{ g}$$

$$d_{\text{νερ}} = 1 \text{ g/cm}^3$$

$$d_{\text{νερ}} = \frac{M_{\text{νερ}}}{V_{\text{νερ}}} \Rightarrow 1 = \frac{400}{V_{\text{νερ}}} \Rightarrow$$

$$V_{\text{νερ}} = 400 \text{ cm}^3 \text{ (ένδειξη)}$$

ή 400 mL