

$$2) \quad m = V\rho = (V - v)\rho_1 + v\rho_2 \quad V = a^3$$

[illegible]

[illegible]

$$\underline{F_D + F_A = mg} \quad ; \quad \rho_0 g V + F_D = \rho_D g V$$

$$V = \frac{F_T}{g(\rho_T - \rho_0)} \quad \text{mg} \quad \text{sub) and } g \text{ in } \text{N/kg} \quad \rho_T, \rho_0 \text{ in } \text{kg/m}^3 \quad F_T = F_2 = 2$$

$V = 0.51 \text{ m}^3$ , dry  $F_{\text{m}} = F_{\text{d}} = 25$ , 276  $V = 0.255 \text{ m}^3$

2)  $\vec{a}$  und  $\vec{b}$  orthogonal, da  $\vec{a} \cdot \vec{b} = 0$

$$FA \pm Fi = \cdot p_i gV$$

$$p_i = p_0 \pm (p_p - p_0) \frac{Fi}{F_p}$$

$$p_0 gV + \cancel{p_i gV} = \cdot p_i gV$$

$$\cancel{p_i} = p_0 \pm p_i gV$$

$$p_i = p_0 \pm \frac{Fi}{gV} = p_0 \pm \frac{F_i}{g \frac{F_p}{p_p - p_0}} = p_0 \pm (p_p - p_0) \frac{F_i}{F_p}$$

+ any number by zero,

by zero, by zero

any number by zero +

any by zero -

4. any  $F_p = 26$

$$p_i = 1.4, 1.2, 0.8, 0.6 \text{ g/100}$$

$$F_p = 16$$

$$p_i = 1.4, 0.6, 0.2 \text{ g/100}$$

4.  $\boxed{22 - 14 = 8 \text{ g/100}}$

$$4. \frac{15}{60} = \underline{\underline{150}}$$

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