

1) Dano

$$m_1 = 2,92 \text{ кг}$$

$$m_2 = 1,13 \text{ кг}$$

$$\rho_1 = 7300 \text{ кг/м}^3$$

$$\rho_2 = 11300 \text{ кг/м}^3$$

$$\rho_3 = ?$$

$$V_3 = ?$$

$$m_3 = ?$$

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

$$V_3 = V_1 + V_2$$

$$m_3 = m_1 + m_2$$

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

$$V_1 = \frac{m_1}{\rho_1} = \frac{2,92}{7300} = 0,0004 \text{ м}^3$$

$$V_2 = \frac{m_2}{\rho_2} = \frac{1,13}{11300} = 0,0001 \text{ м}^3$$

$$V_3 = V_1 + V_2 = 0,0004 + 0,0001 = 0,0005 \text{ м}^3$$

$$m_3 = m_1 + m_2 = 2,92 + 1,13 = 4,05 \text{ кг}$$

$$\rho = \frac{m}{V} = \frac{4,05}{0,0005} = 8100 \text{ кг/м}^3$$

108

5) Dano

$$V_0 = 72 \text{ км/ч}$$

$$t_0 = 10 \text{ с}$$

$$a = ?$$

$$s = ?$$

$$a = \frac{V_x - V_0}{t}$$

$$s = V_0 \cdot t + \frac{a \cdot t^2}{2}$$

$$V_{\text{ср}} = \frac{s}{t}$$

$$a = \frac{0 - 72 \text{ км/ч}}{10 \text{ с}} = 7,2 \text{ м/с}^2$$

$$s = 72 \cdot 10 + \frac{7,2 \cdot 10^2}{2} = 1080 \text{ м}$$

$$V = \frac{1080}{10} = 108 \text{ км/ч}$$

88

$$4) \frac{R_1 R_2}{R_1 + R_2} = 3 \text{ (напряжение)}$$

$$R_1 + R_2 = 16 \text{ (сопротивление)}$$

$$R_1 = 16 - R_2$$

$$\frac{R_2 \cdot (16 - R_2)}{R_2 + (16 - R_2)}$$

$$R_1 = 16 - 12 = 4 \text{ Ом}$$

$$R_2 = 16 - 4 = 12 \text{ Ом}$$

108

ответ 288

Погорел А.Б.
Кыснейдов Е.М.

~~288~~
288