

1) Dano:

$$L = 3 \text{ м.}$$

$$v_1 = 1 \text{ м/с}$$

$$Q_0 = 20 \text{ м/мин}$$

$$Q = 10 \text{ м}$$

$$1 \text{ м}^3 - 5 \text{ м}$$

$$t = 1 \text{ мин}$$

$$v_2 = ?$$

$$Q_0 = 20 \text{ м} - Q_1 = 10 \text{ м} \Rightarrow 10 \text{ м. } S = L.$$

$$S = v t \Rightarrow v_2 = \frac{S}{t} \Rightarrow v_2 = \frac{3 \text{ м}}{60 \text{ с}} = 0,05 \text{ м/с}$$

ОТВЕТ: $0,05 \text{ м/с} = v_2.$

2) Dano:

$$v_{\text{max}} = v.$$

$$v_{\text{группы}} = v = \frac{K}{R}$$

$$R = ?$$

$$v = \frac{S}{t} = v = \frac{R}{t}.$$

$$\frac{v = \frac{R}{t}}{\text{max}} \rightarrow \frac{v = \frac{K}{R}}{\text{группа}} \Rightarrow v = v.$$

$$v = \frac{K}{R} : \frac{R}{t} \Rightarrow v = \frac{K}{R} \cdot \frac{t}{R} = v = \frac{K \cdot t}{R} \Rightarrow R = \frac{K \cdot t}{v}$$

ОТВЕТ: $R = \frac{K \cdot t}{v}$

3) Dano:

$$m_m = 500 \text{ м}$$

$$M = 1000 \text{ кг}$$

$$h_1 = 1 \text{ м.}$$

$$h_2 = 1 \text{ м.}$$

$$\rho_g = 800 \text{ кг/м}^3$$

$$\rho_b = 1000 \text{ кг/м}^3$$

$$h_3 = ?$$

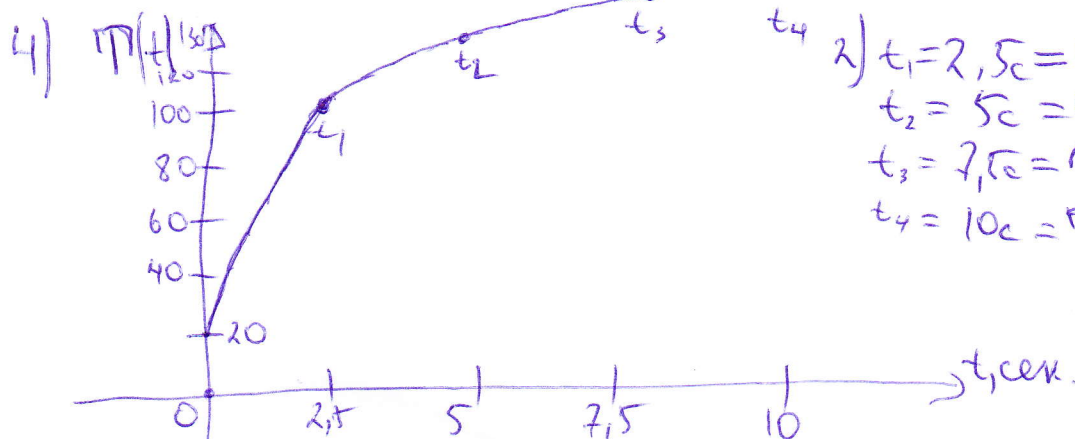
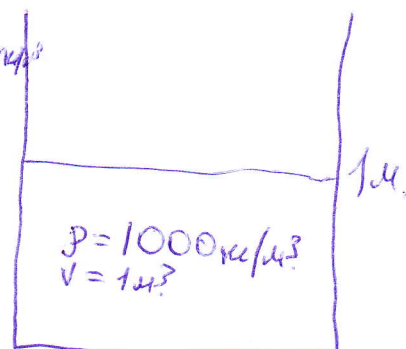
$$\rho_b - \rho_g = 1000 \text{ кг/м}^3 - 800 \text{ кг/м}^3 = 200 \text{ кг/м}^3$$

$$h_1 = h_2 = 1 \text{ м.}$$

$$h_1 + h_2 = 2 \text{ м.}$$

$$h_3 = 2 \text{ м} - 0,2 \text{ м} = 1,8 \text{ м.}$$

ОТВЕТ: $h_3 = 1,8 \text{ м.}$



$$2) t_1 = 2,5 \text{ с} = \pi = 100^\circ \text{C}$$

$$t_2 = 5 \text{ с} = \pi = 130^\circ \text{C}$$

$$t_3 = 7,5 \text{ с} = \pi = 150^\circ \text{C}$$

$$t_4 = 10 \text{ с} = \pi = 160^\circ \text{C}$$

5)

6 → 5 → 4 → 3 → 2 → 1

