

Ny

$$L = 360 \text{ km}$$

$$v_k = 72 \frac{\text{km}}{\text{ч}}$$

$$\Delta t = 15 \text{ мин}$$

$$\Delta t_c = 27$$

$$v_1 = 90 \frac{\text{km}}{\text{ч}}$$

$$\Delta t_0 = 17$$

$$v_2 = 80 \frac{\text{km}}{\text{ч}}$$

$$v_{\text{прк}} = ?$$

$$v_{\text{прс}} = ?$$



Если для Континентал экан след оин
ножен, то он проиен для бек
нуб за 5 часов \Rightarrow он селан 2 перепр-
ва по 15 минута $\Rightarrow t_{\text{ок}} = 5,5 \text{ ч} \Rightarrow$

$$v_{\text{прк}} = \frac{360 \text{ km}}{5,5 \text{ ч}} = 65,45 \frac{\text{km}}{\text{ч}}$$

$$t_{\text{гбс}} = \frac{180 \text{ km}}{90 \frac{\text{km}}{\text{ч}}} + \frac{180 \text{ km}}{80 \frac{\text{km}}{\text{ч}}} + 17 = 5,25 \text{ ч}$$

$$v_{\text{прс}} = \frac{360 \text{ km}}{5,25 \text{ ч}} = 68,57 \frac{\text{km}}{\text{ч}}$$

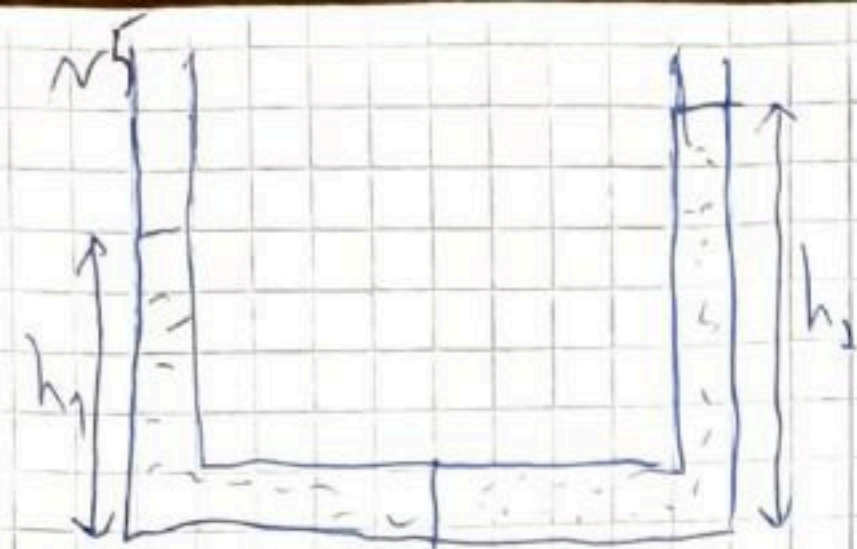
$$t'_{\text{гбс}} = t_{\text{гбс}} + 27 = 7,25 \text{ ч}$$

$$t_{\text{гбс}} \vee t_{\text{ок}}$$

$t_{\text{ок}} < t'_{\text{гбс}} \Rightarrow$ Континентал выиграл

$$t_{\text{гбс}} = t'_{\text{гбс}} - 17 = 6,25 \text{ ч}$$

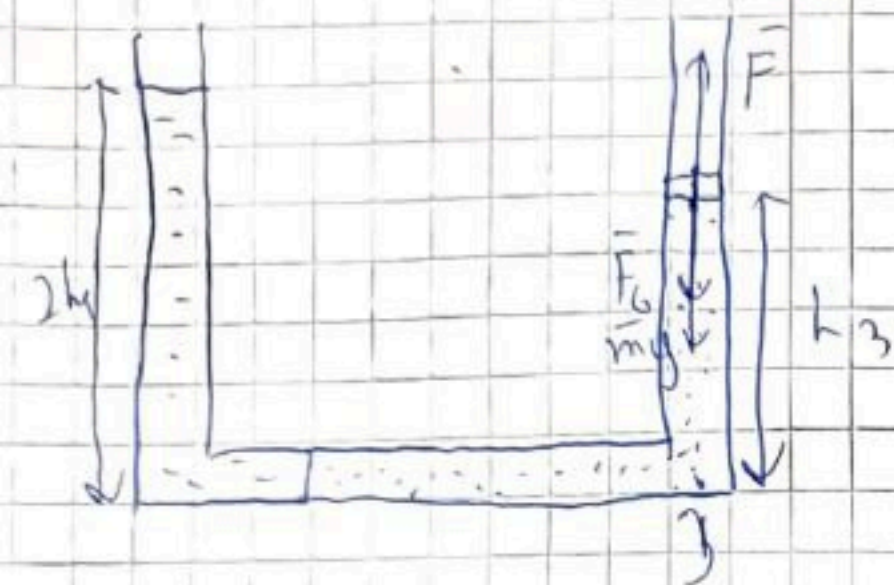
$t_{\text{гбс}} > t_{\text{ок}} \Rightarrow$ Нет, не пересом



1 вариант (гр. воды сверху)

$$\rho_k g h_2 = \rho_{\text{в}} g h_1$$

$$h_1 = \frac{\rho_k h_2}{\rho_{\text{в}}} = 0,8 h_2 = 16 \text{ см}$$



То 1 гр. груз помещен:

$$F = F_0 + mg$$

$$p = p_0 + \frac{mg}{S}$$

$$p_3 = p + \rho_k g h_3 = p_0 + \frac{mg}{S} + \rho_k g h_3$$

$$p_1 = p_0 + \rho_{\text{в}} g 2h_1$$

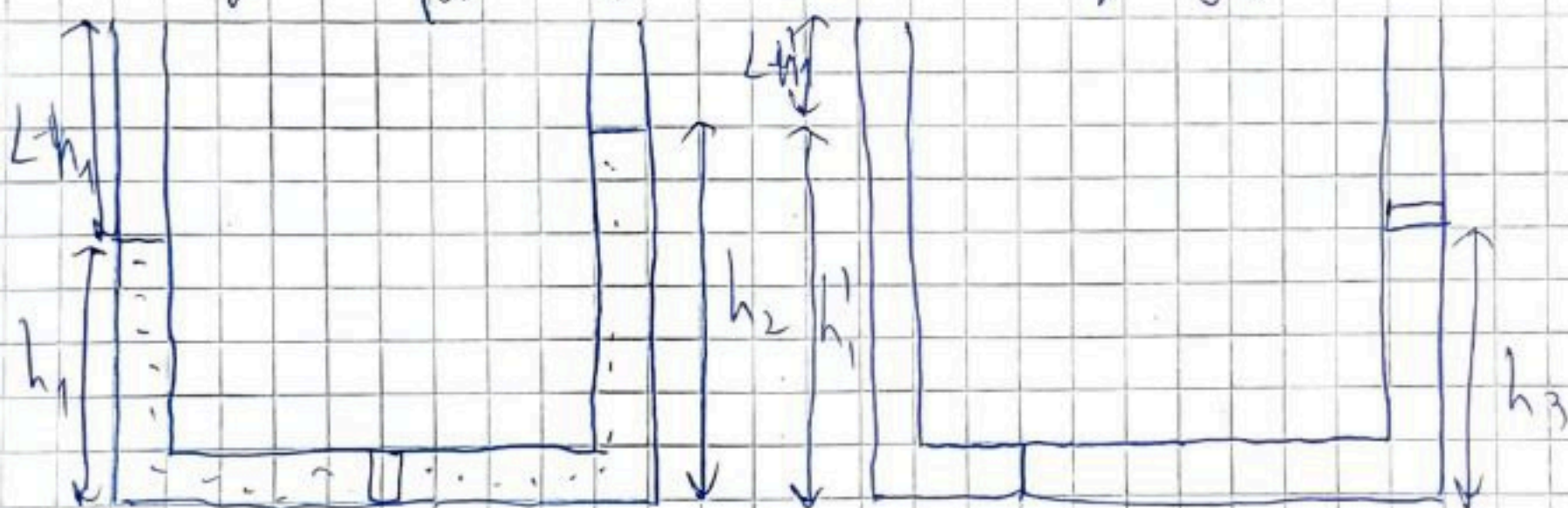
$$\frac{mg}{S} + \rho_k g h_3 = \rho_{\text{в}} g 2h_1$$

$$m = S(\rho_{\text{в}} \cdot 2h_1 - \rho_k h_3)$$

$$h_3 = h_2 - h_1 = 4 \text{ см}$$

$$m = 50 \text{ см}^2 (1 \frac{\text{г}}{\text{см}^3} \cdot 2 \cdot 16 \text{ см} - 0,8 \frac{\text{г}}{\text{см}^3} \cdot 4 \text{ см}) = 14402 = 1,44 \text{ кг}$$

2 вариант (гр. воды сверху)



$$h_1' - h_1 > h_2 \Rightarrow h_3 = h_2 - (h_1' - h_1) < 0 \Rightarrow$$

Планов не можем составить

Ответ: 1,44 кг

2b

Dikno

$$\frac{l_1}{l_2} = \frac{2}{3}$$

$$m_2 = 2 \text{ kg}$$

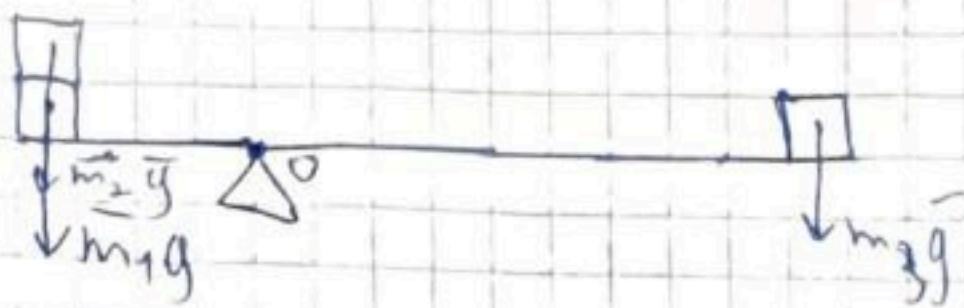
$$\Delta l = 2 \text{ m}$$

$$a = 1 \text{ m}$$

$$m_1 = ?$$

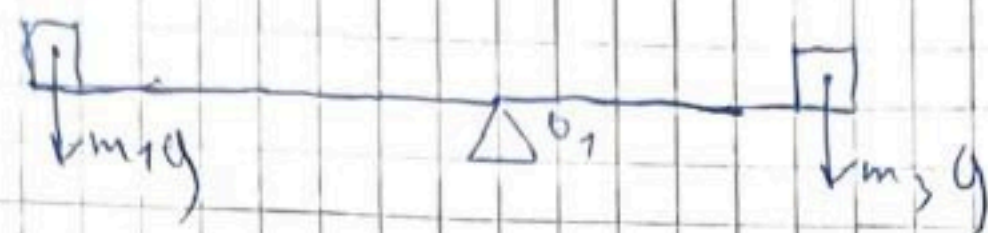
$$m_2 = ?$$

$$m_3 = ?$$



Untuk 2 Yp sama di titik O:

$$(m_1 g + m_2 g) 2a = m_3 g 5a$$



Untuk 2 Yp sama di titik O1:

$$m_1 g \cdot 4a = m_3 g \cdot 3a$$

$$2m_1 g + 2m_2 g = 5m_3 g$$

$$4m_1 = 3m_3$$

$$4m_1 + 4m_2 = 10m_3$$

$$4m_1 = 3m_3$$

$$3m_3 + 4m_2 = 10m_3$$

$$4m_1 = 3m_3$$

$$4m_2 = 7m_3$$

$$4m_1 = 3m_3$$

$$m_3 = \frac{4m_2}{7}$$

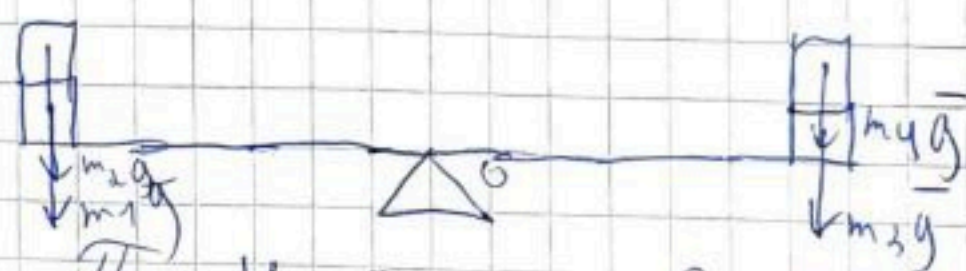
$$4m_1 = 3m_3$$

$$m_3 = 1\frac{1}{7} \text{ kg}$$

$$m_1 = \frac{3m_3}{4}$$

$$m_3 = 1\frac{1}{7} \text{ kg}$$

$$m_1 = \frac{6}{7} \text{ kg}$$



Untuk 2 Yp sama di titik O:

$$(m_2 g + m_1 g) 3.5a = (m_4 g + m_3 g) 3.5a$$

$$3.5m_2 + 3.5m_1 - 3.5m_3 = 3.5m_4$$

$$m_2 + m_1 - m_3 = m_4$$

$$m_4 = 2 \text{ kg} + \frac{6}{7} \text{ kg} - 1\frac{1}{7} \text{ kg} = 1\frac{5}{7} \text{ kg}$$

Jawab: $m_1 = \frac{6}{7} \text{ kg}$, $m_2 = 1\frac{1}{7} \text{ kg}$, $m_4 = 1\frac{5}{7} \text{ kg}$