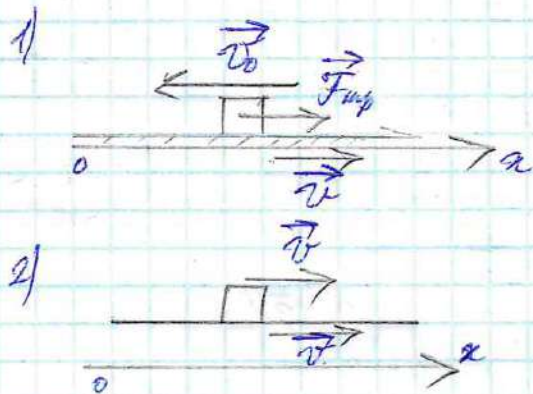


~5

Dano:  
 $v_0 = 5 \text{ m/s}$   
 $t = 4 \text{ s}$   
 $\mu = 0,2$   
 $\vec{v}_0 \perp \vec{v}$   
 $v = ?$

Poszukiwane:



$$a = \frac{v - v_0}{t}$$

oni  $a = \frac{v + v_0}{t}$

$$\vec{F} = m\vec{a}$$

oni  $F_{fr} = ma$ ,  $F_{fr} = \mu N$ ,  $N = mg$

$$\mu mg = ma$$

$$\mu g = a$$

$$\mu g = \frac{v + v_0}{t} \cdot t$$

$$t\mu g = v + v_0$$

$$v = t\mu g - v_0$$

$$v = 4 \text{ s} \cdot 0,2 \cdot 10 \text{ m/s}^2 - 5 \text{ m/s} = 3 \text{ m/s}$$

Odpowiedź:  $3 \text{ m/s}$

21

Dato: Dikerit

$l$   $mg + 2F_{mp} = 0 - 10 \cdot 13 \cdot k$

$R = \frac{l}{6}$   $Dy: mg - 2F_{mp} \cos \theta = 0$

$l_1 = \frac{l}{2}$   $mg = 2F_{mp} \cos \theta$

$k = \mu$   $\sin \theta = \frac{\frac{l}{6}}{\frac{l}{2}} = \frac{l \cdot 2}{6 \cdot l} = \frac{1}{3}$

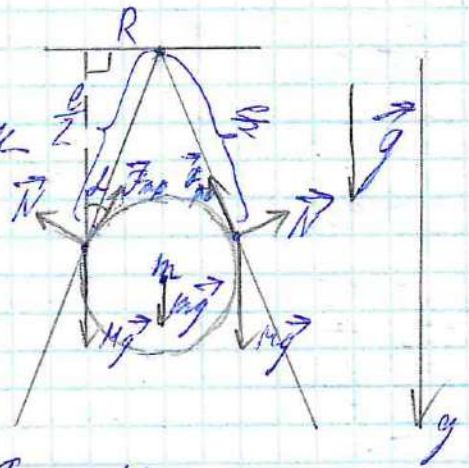
$m$

$M = 9$

$L \approx 19,47^\circ$   $F_{mp} = \mu N$

$mg = 2\mu N \cos \theta = 2kN \cos \theta$

$N = \frac{mg}{2k \cos \theta}$



$M_1 = M_2$

$\frac{NR}{2} = \frac{Mg \cdot \frac{l}{6}}{\frac{l}{2}}$

$3N = Mg$

$M = \frac{3M}{2k \cos \theta}$

$M = \frac{3m}{2k \cos \theta}$

Ordeat  $M = \frac{3m}{2k \cos \theta}$

12

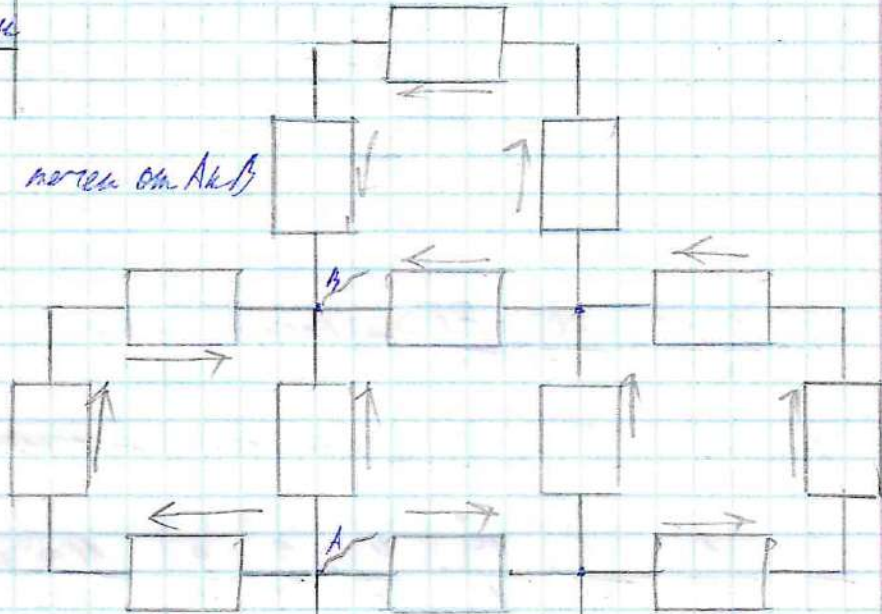
Дано

Схема

$R = 18 \text{ Ом}$

$P_0 = 9$

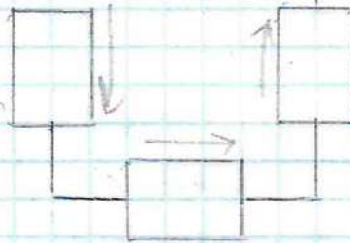
Найти ток через  $A_1$  и  $A_2$



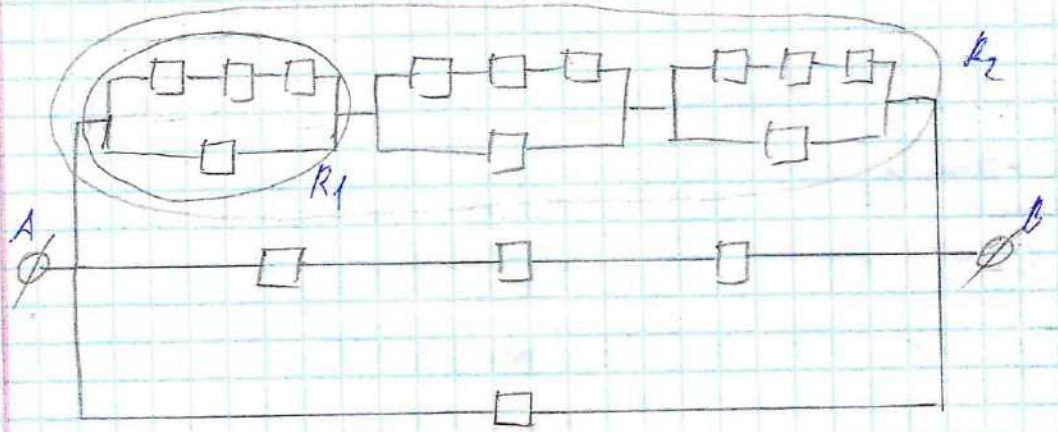
Найти направление тока

всех по 4 крайних

узлов



Построить схему, соблюдая закон:



$$R_1 = \frac{3R \cdot R}{3R + R} = \frac{3R^2}{4R} = \frac{3R}{4} \text{ — паралл. соeq.}$$

26  $R_2 = 3R_1 = \frac{3R}{4} \cdot 3 = \frac{9R}{4}$  — соeq. по обобщенной формуле

$$\frac{1}{R_0} = \frac{1}{\frac{9R}{4}} + \frac{1}{3R} + \frac{1}{R} = \frac{4}{9R} + \frac{3}{9R} + \frac{9}{9R} = \frac{16}{9R} \text{ — паралл. соeq.}$$

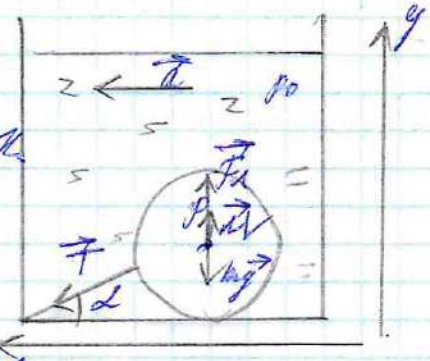
$$R_0 = \frac{9R}{16} \Rightarrow$$

$$R_0 = \frac{9 \cdot 18 \text{ Ом}}{16} = 10,125 \text{ Ом}$$

Ответ: 10,125 Ом

N3

Dikd	Ditanyakan
$V_m = V$	
$P_m = P$	
$P_0 = P_0$	
LL	
a	
F = ?	



$h = \rho V$      $F_A = \rho_0 g V$

$\vec{F} + m\vec{g} + \vec{T} + \vec{F}_A = m\vec{a}$   
 $F = N - h \rho g$   
 Oxi:  $T \cos \alpha = ma$   
 Oyi:  $N + F_A = mg + T \sin \alpha$

N4

$$N = T_A + mg + T \sin \alpha$$

$$N = \frac{ma}{\cos \alpha} + \rho V g - \rho_0 g V$$

$$N = \rho V g \sin \alpha + \rho V g - \rho_0 g V$$

$$N = V (\rho g \sin \alpha + \rho g - \rho_0 g)$$

$$N = V (\rho g \sin \alpha + g (\rho - \rho_0))$$

Omlenak  $N = V (\rho g \sin \alpha + g (\rho - \rho_0))$

N4

Dikd	Ditanyakan
$m_a = 40g$	$Q_{camp} = Q_{mua}$
$t_a = -20^\circ C$	$c_a m_a \Delta t_a = c_b m_b \Delta t_b + \lambda m_e$
$m_b = 50g$	$c_a m_a \Delta t_a - c_b m_b \Delta t_b = \lambda m_e$
$t_b = 60^\circ C$	or $\frac{c_a m_a \Delta t_a - c_b m_b \Delta t_b}{m_e} = 398,09 \frac{J}{g} \approx 398 \frac{J}{g}$

50

55

$\frac{1}{2} \approx 428^\circ$  |  $\text{Omlow} \approx 398 \frac{\text{Dm}}{2}$   
 $2-9$