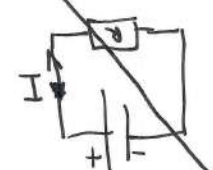

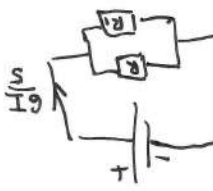


1. 
$$U = IR$$

2. 
$$R_0 = R + R_1$$

$$I \cdot R_0 = U$$

3. 
$$R_0 = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2}}$$

$$I \cdot R_0 = U$$

4.
$$I \cdot R_0 = U$$

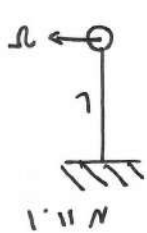
$$\frac{U}{R_1 + R_2} \cdot R_1 = U$$

Условие: $v = 2\sqrt{gl}$

$$v = \sqrt{4gl} = 2\sqrt{gl}$$

$$\frac{mv^2}{2} = mg \cdot 2l$$

а) № 3. С. 3. $F_{k1} + F_{k2} = F_{n1} + F_{n2}$! $F_{k1} = \frac{mv^2}{2}$ $F_{n2} = mg \cdot 2l$



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Илфр	№1	№2	№3	№4	№5	Итор	Полиср
11/36	8	6	10	10	34		

1) Т.к. I & R не зависят от t, то

$$I = \frac{R}{U} = \text{const} \cdot \text{Тогда } U \text{ зависит от } t$$

и тогда можно получить уравнение R.

$$U = \frac{c}{I \Delta t} = \frac{c}{I} \quad ! \quad t_0 = 0$$

$$U = \frac{I t}{c} \rightarrow \text{т.к.}$$

$$I = \frac{R}{U} = \frac{I t}{R c} \rightarrow \text{т.к.}$$

$$R(t) \cdot c = U_0 \cdot t$$

$$R(t) = \frac{c}{t} \cdot R_0$$

2) Т.к. I & R не зависят от t, то

$$U = IR = \text{const} \cdot ! \quad U = \frac{c}{q}$$

$$\frac{q}{c(t)} = IR$$

$$\frac{c(t)}{t} = R$$

$$q(t) = \frac{c}{R}$$

или

Null y

1) T.K. konstanter Parameter, to

zupay na null dygt ushuvata

no zavany: $q = q_0 - It$! 25

Torga, u dygt ushuvata:

$$u = \frac{q}{c} = \frac{q_0 - It}{c} = u_0 - \frac{I}{c} t$$

$$R(t) = \frac{I}{u(t)} = \frac{I}{u_0 - \frac{I}{c} t}$$

$$u_0 = I_0 \cdot R_0$$

$$R(t) = \frac{I}{I(R_0 - \frac{c}{I} t)} = R_0 - \frac{c}{I} t$$

2) Tax rate konstantniy, to u dygt ushuvata, a
 avayto ushuvata, to u dygt ushuvata

$$c(t) = \frac{q(t)}{u} ; u = IR$$

$$q = q_0 - It ; q_0 = u \cdot c_0$$

$$q = cu - It$$

$$c(t) = \frac{cu - It}{cu - It} = c_0 - \frac{I}{c} t$$

$$I = \frac{q}{u} = \frac{q}{I R}$$

$$c(t) = c_0 - \frac{I}{c} t$$

$$\text{Answer: } R(t) = R_0 - \frac{c}{I} t$$

$$c(t) = c_0 - \frac{I}{c} t$$

Null y

№ 11.4.3

1) Karga maksimum akan timbul pada R:

$$\frac{E}{r+R} = I \quad (1)$$

2) Karga maksimum R_0 dan r pada R:

$$\frac{E}{r+R_0+R} = I \cdot \frac{3}{4} \quad (2)$$

$$R_0 = r+R$$

3) Karga maksimum pada R pada R:

$$\frac{1}{R_0} = \frac{1}{r} + \frac{1}{R} = \frac{R+r}{rR}$$

$$R_0 = \frac{rR}{r+R}$$

$$\frac{E}{6I} = \frac{r + \frac{rR}{r+R}}{R} \quad (3)$$

misal (4):

$$E = I r + I R$$

$$I(r+R) = \frac{3}{4} I I (r+R) + \frac{3}{4} I R$$

$$\frac{4}{I} (r+R) = \frac{3}{4} I R$$

$$3R_0 = r+R$$

$$r = 3R_0 - R$$

$$E = I (3R_0 + R - R) = 3R_0 I$$

misal (3):

$$\frac{E}{\frac{5}{2} R} = \frac{3IR_0(r+R)}{(3R_0 - R)(r+R) + 5R_0 r}$$

$$(6R_0 - 2R)(r+R) + 2R_0 r = 5R_0 r + 5R_0 r$$

$$6R_0 r - 2Rr - 2R^2 + 6R_0 r + 6R_0 r - 2R^2 - 2Rr = 5R_0 r + 5R_0 r$$

$$R_0^2 + R_0 r - 2R^2 = 0 \quad | : R \neq 0$$

Maka S

$$\left(\frac{R_1}{R}\right)^2 + \frac{R_1}{R} - 2 = 0$$

$$\frac{R_1}{R} = 1 \quad \text{wenn } \frac{R_1}{R} = -2 \quad (\text{Nur negativ})$$

$$R_1 = R$$

Übersch: $R_1 = R$

N 11.2

1. $Q = 0$

$$\Delta U_1 + A_1 = 0$$

$$A_1 = -\Delta U_1 = A_{\text{ag}} \quad \text{ds.}$$

~~$$A_1 = \frac{3(p_2 - p_1)V}{2} = -3p_2 V$$~~

2. $V_{12} = \text{const} : A_{12} = 0 \quad \text{ds.}$

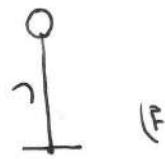
3. $T = \text{const} ! \Delta U_{21} = 0$

$$\Delta U_{23} = Q ; \Delta U_{23} = 0 = \frac{2}{3} p_2 V - \frac{1}{3} p_3 V = \frac{1}{3} (2p_2 - p_3) V$$

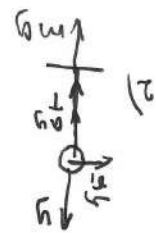
$$(p_3 - 2p_2)V = \frac{2}{3} Q = 2Q$$

$$Q_{31} = A_{31} = A_{23} \quad \text{ds.}$$

11.1



0/2



2) Умножить тело со стороны нормали опоры, нестроганно, тогда T & берем тоже тело

Т.о.

мы 2 пар:

$$\vec{T} + m\vec{g} = m\vec{a}_y$$

$$y: -T - mg = -ma_y$$

$$T = m(g + a_y); \quad a_y = \frac{v_1^2}{r} \quad 3.5$$

$$\frac{v_1^2}{r} - g \geq 0$$

$$v_1^2 \geq gr$$

$$v_1^2 \geq gr$$

2) 3.3: 10

$$F_{x1} + F_{x2} = F_{x3}$$

$$\frac{mv_2^2}{r} = \frac{mv_1^2}{r} + mg \cdot 2r \quad 2.5$$

$$v_2^2 = v_1^2 + 4gr = 5gr$$

11.1.1

7.2017

35
$$\frac{v = \sqrt{5gl}}{v = \sqrt{5gl}}$$