

II ( )

$$-2 \quad \frac{8}{40} .$$

1

$$, \quad V = 10 / \quad L = 32 , \quad t = 10 .$$

$$, V + V ,$$

$$t = t_1 + t_2 = \frac{L}{V - V} + \frac{L}{V + V}$$

$$V = V_{ck} \sqrt{1 - \frac{2L}{V_{ck} t}} = 6 /$$

$$V = 6 / .$$

-60.

40

20

2

$$V_1/V_2 = n = 2, \quad ?$$

$$mg = \frac{1}{3} \rho_1 g V, \quad mg = \frac{2}{3} \rho_2 g V, \quad mg = \rho_3 g V_0.$$

$V -$

$, V_0 -$

$, 3 -$

$$\rho_3 = \frac{m_1 + m_2}{V_1 + V_2} = \frac{m_1 + m_2}{V_2(n+1)},$$

$m_1, m_2, V_1, V_2 -$

$$m_1 = \rho_1 V_1, \quad m_2 = \rho_2 V_2.$$

$$\frac{V_0}{V} = \frac{2(n+1)}{3(2n+1)},$$

-100.

80

40

3

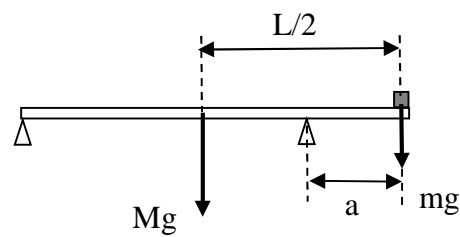
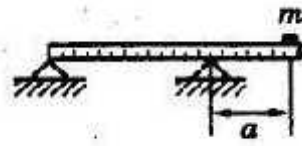
$$M = 60$$

$$L = 30$$

$m$ .

?

$$a = 5$$



$$mga = Mg \left( \frac{L}{2} - a \right)$$

$$m = M \frac{L - 2a}{2a} = 120$$

$$m \leq 120$$

- 80.

50

30

4

$$= 1,9$$

$$= 0,950 / ^3.$$

$$S = 40 ^2.$$

?

$$(M + m)g = \dots g h_1 S \quad (1)$$

$M -$  ;  $m -$  ;  $h_1 -$

; -

$$(M + m)g = \dots g h_2 S + \dots g h S \quad (2)$$

$M -$  ;  $m -$  ;  $h_2 -$  ;  
 $h -$  ;  
 :

$$\Delta h = h_1 - (h_2 + h_B) \quad (3)$$

(1) (2),

$$h_1 = h_2 + h \frac{\dots B}{\dots} \quad (4)$$

, :

$$h_B = \frac{m}{\dots_B S} \quad (5)$$

(4) (5)

$$\Delta h = \frac{m}{S} \left( \frac{1}{\dots} - \frac{1}{\dots_B} \right) = \frac{\dots_B - \dots}{\dots_B \dots} \frac{m}{S} = 2,5 \cdot 10^{-2}$$

- 100.