

- 50.

1.

$$Q_1 = mc(40 - 20) = 20mc,$$

$$Q_2 = mc(50 - 20) = 30mc.$$

1,5

$$Q_3 = mc(100 - 40) = 60mc.$$

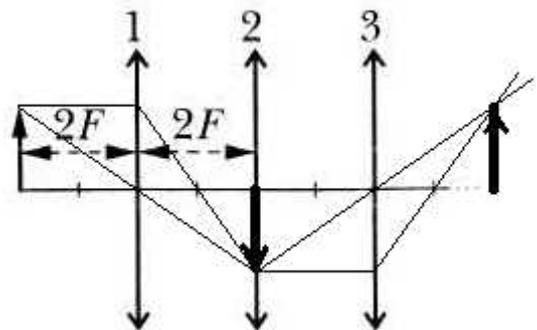
$$Q_4 = 1,5Q_3 = 90mc.$$

$$90mc = mc(100 - 50) + \Delta mc(100 - 60) = 50mc + 40\Delta mc$$

$$40mc = 40\Delta mc$$

$$\Delta m = m$$

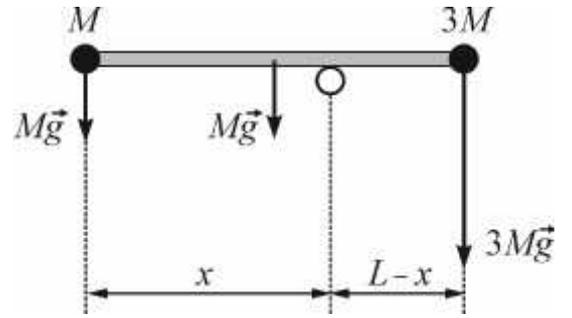
2.



2F

3.

$x -$
 (. .).
 $: 3Mg(L - x) = Mg(x - L/2) + Mg x.$
 $x = 0,7L = 0,7$.



4.

$t = 10^\circ\text{C}.$
 $t_1 = 10^\circ\text{C}$, $t_2 = 3^\circ\text{C}$, $t_3 = 180^\circ\text{C}$. $t_4 = 600^\circ\text{C}$
 0°C , 10°C ,
 λm_1 ,
 $c(m_1 + m_2)\Delta t.$
 $I^2 R$, $I^2 R \tau_1 = \lambda m_1$
 $I^2 R \tau_2 = c(m_1 + m_2)\Delta t.$
 $m_1 = I^2 R \tau_1 / \lambda \approx 1,43$, $m_2 = I^2 R \tau_2 / (c\Delta t) - m_1 \approx 2$.

5.

$\rho_k = \rho_B + \frac{m}{V}$,
 $m -$, $V -$.