II (**)**

10

1. (10   **)**

1

)
$\vec{N} = 0,$

,

.

$F = F - mg = \ldots gV - \ldots_1 gV = gV(\ldots - \ldots_1).$

)   ,   ,

, . .   .

$1 -$ $, 2 -$,

$3 -$.

$ox : F \cdot \cos r = ma$

$oy : F - mg - F \sin r = 0$

$(F \cos r)^2 = (ma)^2$

$(F \sin r)^2 = (F - mg)^2$

$F = \sqrt{(F - mg)^2 + (ma)^2} = V\sqrt{g^2(\ldots - \ldots_1)^2 + a^2\ldots_1^2}$

2. (4   **)**

$\dfrac{m\hat{}^2}{2} = mc(t - t_0) + rm$ $= 1200$ /

3. (8 **)**

$x - $. , $x << R.$

,

, .

, ,

.

( ).

$F \quad = mg + F$

$F \quad + F \quad = mg + m \quad g$ $\qquad F \quad = m \quad g$ ( )

$F \quad = \ldots \; gV = \ldots \; g\dfrac{4}{3}fR^3 = 2mg = 2\ldots_c 4fR^2 xg$

$x = \dfrac{\ldots \; R}{6\ldots_c} = 1{,}2$

4. (8 **)**

,

.
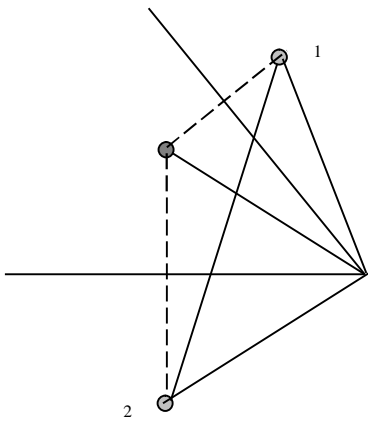
60°. —

— 8

5. (10 **)**

m .

, .

$m_0,$ $\overset{,}{S}$ S_0

:

$$\dfrac{m}{m_0} = \dfrac{S}{S_0} \quad \Rightarrow \quad S = S_0\dfrac{m}{m_0}.$$

S_0 .

,

,

.