II (   )

10

1.

,   .

,   ,

.   ,

.

2.

$$v_0 = \frac{2fR\cos\{}{T_0}.$$

R —   , T_0 —   . $\{=60°$
835   / .
60   /   , v 775   / ,

$$T = \frac{2fR\cos\{}{v},$$

25,85   .
(   ),
12,93   .   12 . 56   .

3.
.   :1)1-
2   ,   ; 2)   .
; 3)   ,   .

4.
-            10   3   ,   -   10.   ,
,   ,
.

5.

$$F = G\frac{mM}{(R+H)^2} -$$, $F = \frac{V^2m}{R+H}$

$$G\frac{mM}{(R+H)^2} = \frac{V^2m}{R+H}$$

$$= 2f\sqrt{\frac{R}{g}(1+\frac{H}{R})^3} = 7200 \quad \cong 2$$

6.

$$T = \frac{2fR}{V}.$$

$$\cdot \frac{GM}{R^2} = \frac{V^2}{R}$$

:   .

$$T = \sqrt{\frac{3\pi}{G\rho}}$$

$= 3 \quad /GT^2 = 1{,}3 \cdot 10^{14} \quad / ^3.$