

:

9.1

12-

φ

12-

$$\omega = 360 / 12 = 30 \quad / \quad = 0,5 \quad /$$

φ

$$= \{ \varphi(\quad): 0,5 \quad / \quad \},$$

h

$$h = \{ \quad / 60 \}$$

$$m = -60 \cdot h.$$

12-

h

12

9.2

: -1,46).

9.3

:

$$= l/v = 2 \cdot 3.14 \cdot R/v. (1)$$

R,

27000

(1 . .)

$$1 \cdot 27000 \cdot 300000 / 1 = 27000 \cdot 300000 / 1$$

(1) :

$$= l/v (2 \cdot 3.14 \cdot 27000 \cdot 300000 / 1) / (230 /) 220 . .$$

9.4

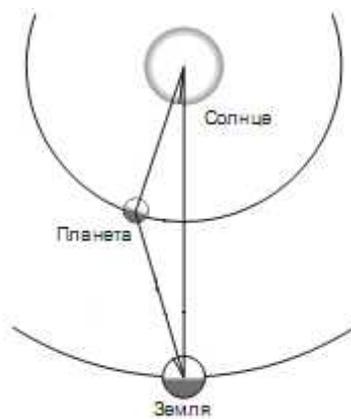
90°

180° (

270°.

180°

9.5



9.6

III

:

$$T = \sqrt{\frac{4\pi^2 a^3}{GM}} = \sqrt{\frac{3f}{G...}},$$

$M-$

,

$,a-$

.

,

$$... = \frac{3f}{T^2 G} \approx 1,4 \cdot 10^{11} \quad / \quad ^3.$$