

N:2	v	t	S
	$100 \frac{\text{km}}{\text{z}}$	$xz$	$y_{\text{km}}$
	$80 \frac{\text{km}}{\text{z}}$	$xz+tz$	$Z_{\text{km}}$ , $y+z=440\text{km}$

$v_{\text{cp}} = ?$

$$\frac{y \text{ km}}{xz} = 100 \frac{\text{km}}{\text{z}}$$

$$80 \frac{\text{km}}{\text{z}} = \frac{Z_{\text{km}}}{xz+tz}$$

• t —

$xz$

$xz+tz$

• v —

$100 \text{ km/z}$

$80 \text{ km/z}$

• S —

$y, 200 \text{ km}$

$Z, 240 \text{ km}, \text{ где } y < Z; y+z=440 \text{ km}$

+ x=1

$S=100 \text{ km}$

$S=160 \text{ km}$   
 $(80 \frac{\text{km}}{\text{z}} \cdot 2z)$

$y < Z; y+z \neq 440 \text{ km} \text{ (X)}$

+ x=2

$S=200 \text{ km}$

$S=240 \text{ km}$   
 $(80 \frac{\text{km}}{\text{z}} \cdot 3z)$

$y < Z; y+z = 440 \text{ km} \text{ (Y)}$

$x = 2z \quad 2+1=3z$

$$v_{\text{cp}} = \frac{S_{\text{общ}}}{t_{\text{общ}}}; v_{\text{cp}} = \frac{y+z}{2x+tz}$$

$$v_{\text{cp}} = \frac{440 \text{ km}}{5z} = 88 \frac{\text{km}}{\text{z}}$$

Ответ:  $v_{\text{cp}} = 88 \frac{\text{km}}{\text{z}}$

105

№3

$$S_{\text{стадии}}(S) = 195 \text{ м.}$$

$$v_{\text{гол}} = 5 \text{ км/ч} = 5000 \text{ м/ч} = 83 \frac{1}{3} \text{ м/мин.}$$

$$t = 14 \text{ ч } 2 \text{ мин } 30 \text{ сек} = 842,5 \text{ мин.}$$

$n_{\text{стадий}} - ?$

$$t_{\text{стадий}} = \frac{S_{\text{стадий}}(S)}{v_{\text{гол}}}; n_{\text{стадий}} = \frac{t}{t_{\text{стадий}}}$$

$$t_{\text{стадий}} = \frac{195 \text{ м} \cdot \text{мин}}{83 \frac{1}{3} \text{ м}} = 2,34 \text{ мин.}$$

$$n_{\text{стадий}} = \frac{842,5 \text{ мин}}{2,34 \text{ мин}} = \sim 360,04 \approx 360$$

Ответ:  $n_{\text{стадий}} = \sim 360$ .

75

№4  $t_1 = 10^\circ\text{C}$

$m_K < m_M$ ,  $m_K$  - камень начал таять в гидрате.

$$t_2 = 90^\circ\text{C}$$

$$Q_1 = c_K m_K (t - t_1) \quad Q_2 = c_M m_M (t_2 - t)$$

$$t = 60^\circ\text{C}$$

$$c_K m_K (t - t_1) = c_M m_M (t_2 - t)$$

$$V_K = 10\% V_M$$

$$\frac{c_K m_K}{c_M m_M} = \frac{(t_2 - t)}{(t - t_1)}$$

$$c_K : c_M - ?$$

$$\frac{c_K m_K}{c_M m_M} = \frac{30^\circ\text{C}}{50^\circ\text{C}} = 0,6; \quad \frac{c_K m_K}{c_M m_M} = 0,6.$$

$$c_K m_K = 0,6 (c_M m_M)$$

$$\frac{c_K m_K}{0,6 (c_M m_M)} = 1; \quad m_K < m_M \Rightarrow c_K < c_M$$

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Ответ:  $c_K < c_M$ .

Угол: 225

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