

№1-есеп
Шері

$$S_1 = 60 \text{ м}$$

$$S_2 = 90 \text{ м}$$

$$t_1 = t_2 = 10 \text{ с}$$

$$S_{\text{opt}} = 75 \text{ м}$$

T/K $v_{\text{opt}} = ?$

$$v_{\text{opt}} = \frac{S_1 + S_2}{t_1 + t_2} = \frac{150}{20} \cdot 75 = S_{\text{opt}} \cdot 425$$

№2-есеп
Шері:

$$R = 100 \text{ м}$$

$$h = 1 \text{ м}$$

$$L = 1,5 \text{ м}$$

T/K $v = ?$

$$M_1 = M_2$$

$$M_1 = F \cdot \frac{L}{2} = mg \cdot \frac{L}{2}$$

$$M_2 = F_{\text{уст}} \cdot h = \frac{mv^2}{R} \cdot h$$

$$mg \cdot \frac{L}{2} = \frac{mv^2}{R} \cdot h$$

$$v^2 = \frac{\sqrt{g \cdot L \cdot R}}{2 \cdot h} = \frac{\sqrt{10 \frac{\text{м}}{\text{с}^2} \cdot 1,5 \text{ м} \cdot 100 \text{ м}}}{2 \cdot 1 \text{ м}} = 27 \text{ м/с} = 97 \text{ км/сағ}$$

№3-есеп

Шері:

$$R = 3R_0$$

$$R_0 = 0$$

$$t = ?$$

$$R = 3R_0 = 0$$

$$t = R = 3R_0 = 0$$

4-есеп

Шері:

$$M = 100 \text{ г}$$

$$T_1 = 20^\circ \text{C}$$

$$T_2 = 50^\circ \text{C}$$

$$T = ?$$

T/K $T = ?$

N1

$$\begin{array}{l|l} \text{Бер: } T = 24^\circ\text{C} & \varphi = \frac{V_1 + V_2}{T} = \frac{706,2}{24^\circ\text{C}} = 29,425 \text{ кк/м}^3 \\ V_1 = 700,2 & \\ V_2 = 6,22 & \\ \hline \varphi = ? & \end{array}$$

N3

$$\begin{array}{l|l} \text{Бер: } R = 100 \text{ м} & \mu_1 = \mu_2 \\ h = 1 \text{ м} & \mu_1 = F \cdot \frac{L}{2} = mg \frac{L}{2} \\ L = 1,5 \text{ м} & \mu_2 = F_{yt} \cdot h = \frac{m \omega^2 R}{R} \cdot h \\ \hline \omega = ? & mg \frac{L}{2} = \frac{m \omega^2}{R} \cdot h \\ & \omega^2 = \frac{gLR}{2h} = \frac{10 \frac{\text{м}}{\text{с}^2} \cdot 1,5 \text{ м} \cdot 100 \text{ м}}{2 \cdot 1 \text{ м}} \approx 27 \frac{\text{м}}{\text{с}^2} = 97 \text{ км/сат} \end{array}$$

N1 есеп

Дер: $s_1 = 60 \mu$ $s_2 = 90 \mu$ $t_1 t_2$	$v_{\text{орп}} = \frac{s_1 + s_2}{t_1 + t_2} = s_{\text{орп}} \frac{150}{10} \cdot 75 = s_{\text{орп}} 1125$
Т/К - $v_{\text{орп}}$	

N2 есеп

Дер: $R = 100 \mu$ $h = 1 \mu$ $h = 1,5 \mu$	$M_1 = M_2$ $M_1 = f \cdot \frac{L}{2} = \mu g \frac{L}{2}$ $M_2 = F \cdot h = \frac{m v^2}{R} \cdot h$ $\mu g \frac{L}{2} = \frac{m v^2}{R} \cdot h$
$v = ?$	$v^2 = \sqrt{\frac{gLR}{2h}} = \sqrt{\frac{10 \frac{\mu}{\text{с}^2} \cdot 1,5 \mu \cdot 100 \mu}{2 \cdot 1 \mu}} =$

$\approx 27 \mu/\text{с} = 97 \text{ км/ч}$

N3 есеп

Дер: $R = 3R_0$ $R = 0$	$R_0 = R$ $R_0 = \frac{1}{3} R$ $R_0 = 0,33$
$I = ?$	

N4 есеп

Дер: $M = 100 \text{ г}$	$M = \frac{20^\circ}{50^\circ} = \frac{30^\circ}{100} =$
$T = ?$	130°