



(ЧЛВНЛОПЕЭ ЭН)

Оценка выполнения обязанностей (заполняется проверяющим)

Оценка выполнения отдельных работ													
(заполняется поверяющим)													
Первая проверка		Вторая проверка		№ задания		Полученный балл		Σ баллов правильно		Σ баллов неправильно		Итого	
1	2	3	4	5	6	7	8	9	10	Σ	1	2	3
48	88	88	88	88	88	88	88	88	88	88	88	88	88
4	5	6	7	8	9	10	Σ	1	2	3	4	5	6
1	2	3	4	5	6	7	8	9	10	Σ	1	2	3
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4	5	6	7	8									

$$\log_4 \log_4 \dots \log_4 x = (\frac{1}{4})^f$$

$$f(n) = \log_2 \log_2 \dots \log_2 n \quad \text{where } \log_2 \log_2 \dots \log_2 n \text{ is } s \text{ times}$$

$\underbrace{S \cdot \dots \cdot S \cdot S}_n$

Прогрессивное и не, где прогрессив на $\frac{1}{3}$, где n - число прогрессив на $\frac{1}{3}$

2 - Классификация на основе (45)

$\mathbb{R} \setminus \{u\}$
 $\mathbb{R} \setminus \frac{\mathbb{Z}}{u\mathbb{Z}}$
 $\mathbb{N} \neq \mathbb{N}$

$$G(4)F \quad 1 < \frac{6}{4 \cdot 2}$$

$$(1-y)f = (1) f \Rightarrow 1 = \frac{5}{\log 2} \quad \text{wobei: } \min = (1) f$$

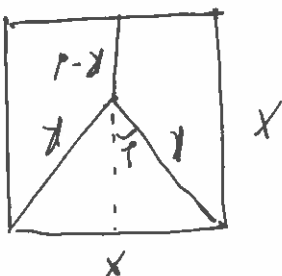
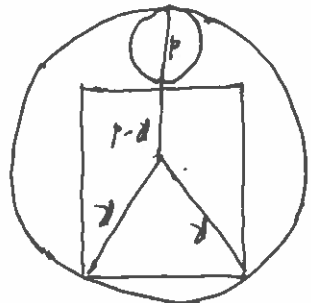
$$84073 \text{ tbc} = 65 = 4 \quad 5 = 45 \text{ b}_1$$

0721: 387426485



Вариант № 2-3

№ 2



$$R = 25$$

$$R - d = 15 - 15 = 0$$

$$x = 2R \cdot \sin d = 50 \sin d$$

$$x = (R - d) + R \cos d = 18 + 25 \cos d$$

$$50 \sin d = 18 + 25 \cos d$$

$$10 \sin d - 5 \cos d$$

$$100 \sin^2 d - 40 \sin d + 4 = 25 - 25 \sin^2 d$$

$$125 \sin^2 d - 40 \sin d - 21 = 0$$

$$\frac{d}{2} = 400 + 2625 = 3025 = 55^2$$

$$\sin d = \frac{20 \pm 55}{125}; \sin d > 0$$

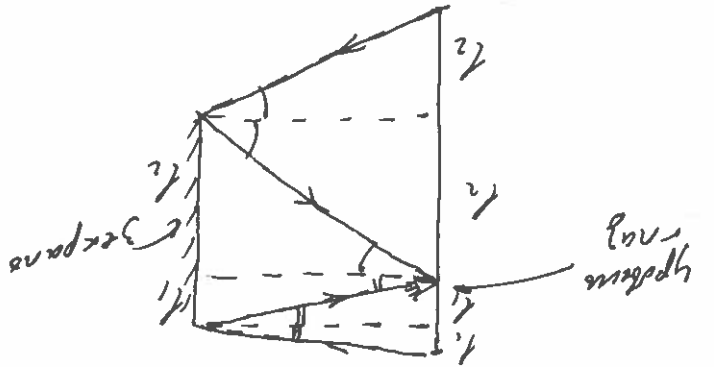
$$\sin d = \frac{75}{125}$$

$$x = 50 \cdot \frac{3}{5} = 30$$

$$d = x^2 = 30^2 = 900$$

$$\text{Ответ: } 900 \text{ кв. см.}$$

№ 6 Число точек пересечения
содержат:

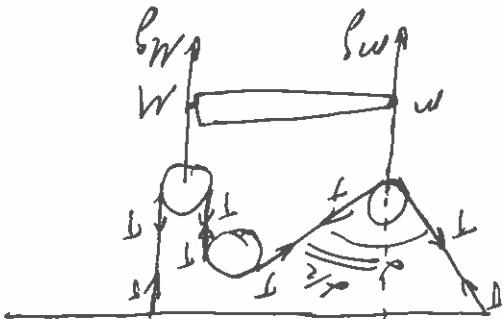


$$\begin{aligned} \text{Стороны} &= 360 \\ \text{Стороны} &= 180^\circ \text{ и } 60^\circ \\ \text{Стороны} &= 120^\circ \text{ и } 120^\circ \end{aligned}$$

$$\text{Стороны: } 120^\circ$$



27

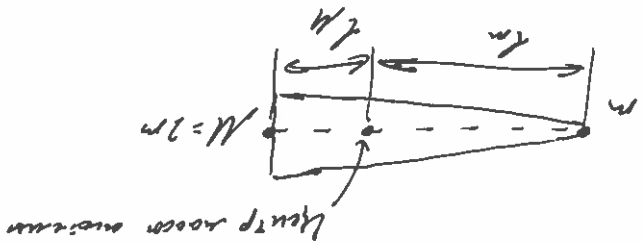


$$m_g = T \cos \frac{\alpha}{2} + T \cos \frac{\alpha}{2}$$

$$M_g = T + T$$

$$\frac{m}{M} = \frac{1}{\cos \frac{\alpha}{2}} \quad \cos \frac{\alpha}{2} = \cos 60^\circ = \frac{1}{2}$$

$$\frac{m}{M} = \frac{1}{\frac{1}{2}} \quad M = 2m$$



$$l_m \cdot m = l_M \cdot M$$

$$\frac{l_m}{l_M} = \frac{m}{M} = \frac{1}{2}$$

$$l_m = 2l_M \quad l_M = \frac{1}{3}l \quad l_m = \frac{2}{3}l$$

$$\frac{l_m}{l} = \frac{2}{3}$$

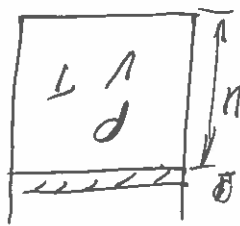
$$O_{дел} : \frac{2}{3}$$



представим концы в одну
точку для удобства
($m \ll M$), соединим
некоторым телом концы



Вариант № 2-5

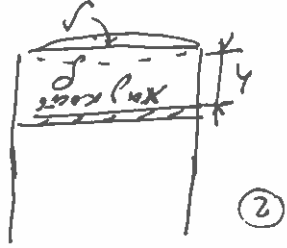


$$P = 24530 \text{ Па}$$

$$T = 100^\circ \text{C}$$

$$P_{\text{н.н.}} = 10^5 \text{ Па}$$

$$P < P_{\text{н.н.}}$$



$$h = 10,8 \text{ см} = 10,8 \cdot 10^{-3} \text{ м}$$

$$V_x = h \cdot V$$

$$m_x^* = \rho \cdot V_x = \rho \cdot h \cdot V$$

состояние 1

$$P V = \nu R T$$

$$P = \frac{m}{M_{\text{моля}} \cdot \nu} \cdot \frac{V}{T}$$

$$V = \frac{U \cdot S}{P}$$

$$P = \frac{P_{\text{н.н.}} \cdot R T}{P_{\text{н.н.}} \cdot R T} = \frac{U \cdot S}{P_{\text{н.н.}} \cdot R T}$$

$$\rho = 1000 \text{ кг/м}^3 \text{ (плотность воды)}$$

$$K = 8,31 \frac{\text{Дж}}{\text{моль} \cdot \text{К}}$$

$$T = 373 \text{ К}$$

$$\rho = \rho(\text{H}_2\text{O}) = 10^3 \frac{\text{кг}}{\text{м}^3} = 10 \cdot 10^{-3} \frac{\text{кг}}{\text{м}^3}$$

$$V = \frac{1000 \cdot 10,8 \cdot 10^{-3} \cdot 8,31 \cdot 373}{18 \cdot 10^{-3} \cdot 24530} = 75,6 \text{ м}^3$$

$$D_{\text{вн.}} = 24,6 \text{ м}$$

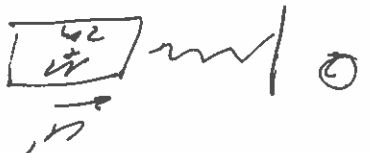
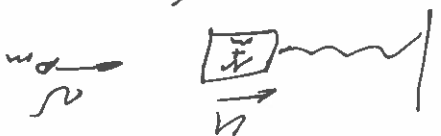




№3

$$M = 4r \quad m = 2r$$

$$(M+n)u = mv$$



$$u'(M+2m) = (M+n)u + mv = 2mv$$

① $E_{\text{упругая}} = 0$
② $0E = mv^2$

③ $0E = \frac{mv^2}{2}$

$$mv^2 = kA_1^2 \quad 2mv^2 = kA_2^2$$

$$A_1^2 = \frac{1}{k} \quad A_2^2 = \frac{1}{k}$$

$$2mv^2 = (M+2m)u^2 + k\left(\frac{A_2^2}{2}\right)^2$$

$$2mv^2 = 2(M+n)u^2 + 2k\frac{A_1^2}{4}$$

$$2mv^2 = (M+2m)u^2 + k\frac{A_2^2}{4}$$

$$2(M+n)u^2 = (M+2m)u^2$$

$$\frac{u_1^2}{u_2^2} = \frac{M+2m}{2(M+n)} \quad \frac{u_1}{u_2} = \sqrt{\frac{M+2m}{2(M+n)}}$$

$$\frac{u_1}{u_2} = \sqrt{\frac{4+2 \cdot 2}{2 \cdot (4+2)}} = \sqrt{\frac{8}{12}} = \sqrt{\frac{2}{3}}$$

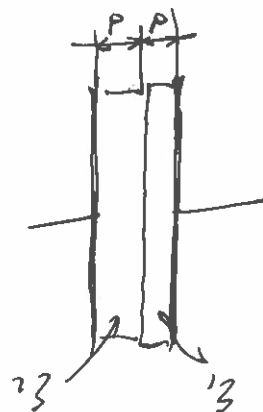
Ответ: $\sqrt{\frac{2}{3}}$



БМ 27-81

Вариант № 2-3

$$N.10. C = \frac{1}{3 \cdot 3 \cdot 3}$$



расчетная зона
2 зоны, конкурирующие

$$C_1 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$C_2 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$T = \frac{1}{T} + \frac{1}{T} = \frac{1}{T}$$

$$\frac{1 \cdot 3 \cdot 3 / P}{2 \cdot 3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$\frac{1 \cdot 3 \cdot 3 / P}{2 \cdot 3 \cdot 3 \cdot 3} + \frac{1 \cdot 3 \cdot 3 / P}{2 \cdot 3 \cdot 3 \cdot 3} = \frac{1 \cdot 3 \cdot 3 / P}{2 \cdot 3 \cdot 3 \cdot 3} \cdot 18'$$

$$\frac{1 \cdot 3 \cdot 3}{(42-2) \cdot 3 \cdot 3} + \frac{1 \cdot 3 \cdot 3}{x \cdot 3} + \frac{1 \cdot 3 \cdot 3}{x \cdot 3} = \frac{1 \cdot 3 \cdot 3}{2 \cdot 3 \cdot 3} \cdot 18'$$

$$24 \cdot \frac{1}{\frac{1}{(42-2) \cdot 3 \cdot 3} + \frac{1}{x \cdot 3} + \frac{1}{x \cdot 3}} = \frac{1}{\frac{1}{2 \cdot 3 \cdot 3}} \cdot 18'$$

$$(42-2) \cdot 9 \cdot 0.1 + x \cdot 5 \cdot 6 + x \cdot 5 \cdot 6 = 29 \cdot 18'$$

$$4021 - 209 + 45x + 45x = 29 \cdot 18'$$

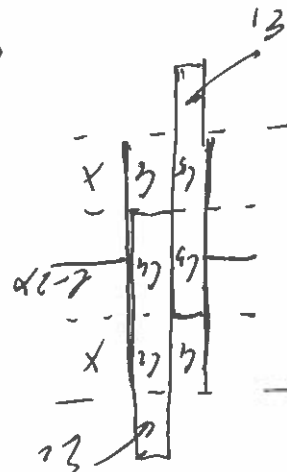
$$24 \cdot 11 = x \cdot 5$$

$$270 = 2 \cdot \frac{45}{11} = x$$

$$-12 = 2 \cdot 442 - 062 = 89.10 : 36 \text{ см}$$

(+) $0.827 : 36 \text{ см}$

121



$$C_1 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$C_2 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$C_3 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$C_4 = \frac{P}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

$$T = \frac{1}{T} + \frac{1}{T} = \frac{1}{T}$$

$$T = \frac{1}{T} + \frac{1}{T} = \frac{1}{T}$$

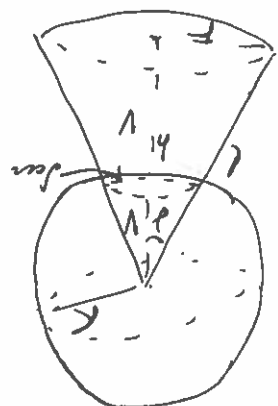
$$T = \frac{1}{T} + \frac{1}{T} = \frac{1}{T}$$

$$C_1 + C_2 + C_3 = \frac{1}{27} + \frac{1}{27} + \frac{1}{27} = \frac{1}{9}$$



Вариант № 2-4

$$\begin{aligned}
 r &= 2 \text{ м} \\
 l &= \frac{r}{\sin \alpha} = \frac{3}{10} \\
 h &= l \cos \alpha = \frac{3}{4} \\
 V_{\text{кон}} &= \frac{1}{3} \pi r^2 h = \frac{1}{3} \pi \cdot 4 \cdot \frac{3}{4} = \frac{4}{3} \pi \\
 V &= K \cdot \frac{3}{4} \pi K^2 \\
 K &= \frac{V_{\text{кон}}}{V_{\text{сеп}}} = \frac{4 \pi R^2}{4 \pi R^2}
 \end{aligned}$$

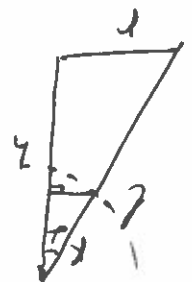


24

$$\frac{16}{3} \pi = \frac{3}{4} \pi K^2 \frac{V_{\text{кон}}}{4 \pi R^2}$$

$$V_{\text{кон}} = \frac{1}{3} \pi \cdot \frac{1}{K} \cdot K^2$$

$$V = V_{\text{кон}} + V_{\text{сеп}} = \frac{16}{3} \pi \frac{1}{K} + \pi K \cdot \frac{1}{K} \cdot K^2$$



$$\begin{aligned}
 x^2 + y^2 &= 2 \\
 r &= \sqrt{2} \\
 \frac{y(\sqrt{2}x-1)}{x(\sqrt{2}y-1)} &= -1 \\
 y(\sqrt{2}x-1) &= -x(\sqrt{2}y-1) \\
 y(\sqrt{2}x-1) + x(\sqrt{2}y-1) &= 0 \\
 (\sqrt{2}xy - y + \sqrt{2}xy - x) &= 0 \\
 2\sqrt{2}xy - x - y &= 0
 \end{aligned}$$

$$\begin{aligned}
 g(h) &= -\sqrt{2}h^2 + 2\sqrt{2}h - 1 \\
 g(h) &= -\sqrt{2}h^2 + 2\sqrt{2}h - 1 \\
 g(h) &= -\sqrt{2}h^2 + 2\sqrt{2}h - 1 \\
 g(h) &= -\sqrt{2}h^2 + 2\sqrt{2}h - 1 \\
 g(h) &= -\sqrt{2}h^2 + 2\sqrt{2}h - 1
 \end{aligned}$$

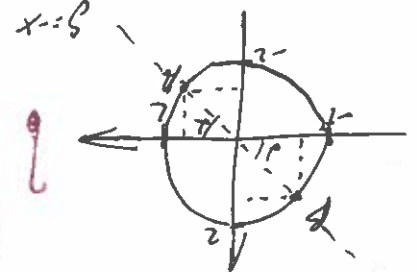
$$\begin{aligned}
 g(x) + g(x) &= 0 \\
 g(x) &= -g(x) \\
 g(x) &= -x
 \end{aligned}$$

неверно

неверно, упрям

Вариант № 2-5

07627: (5'-3') / (3'-5')

$$A(\sqrt{2}, -\sqrt{2}) \quad B(-\sqrt{2}, \sqrt{2})$$
$$e_{\text{eff}} = P$$


②) He presented them as
"everyman"

28-1-1947 : 1-2-1947
 P-Experiment 1-2-1947

$\frac{1}{p} = \frac{1}{f} + \frac{1}{v}$

α -наб-то, нежего грабува а реп-тоо $\frac{1}{5}$

$$\frac{f}{g} = \frac{f_5}{g_5} - \frac{f_6}{g_6} - \frac{f_7}{g_7} + \frac{f_8}{g_8} + \frac{f_9}{g_9} - \frac{f_{10}}{g_{10}} + \frac{f_{11}}{g_{11}} - \frac{f_{12}}{g_{12}} + \frac{f_{13}}{g_{13}} - \frac{f_{14}}{g_{14}} + \frac{f_{15}}{g_{15}}$$

$$1.5) \quad \frac{5}{9} \times \left(-1 + \frac{5}{12} + \frac{5}{12} - \frac{5}{12} - \frac{5}{12} - \frac{5}{12} + \frac{5}{12} - \frac{5}{12} \right) + \frac{5}{9} \times \frac{5}{9} = 0$$

0255 - 62-82 + 742 - 140 - 138 + 748 + 76 - 14

44
 $41^2 \cdot 1031 + 28.21 - \frac{45}{20}$

0555-801.82 + 7914 + 792

211 + 4161 + 7914 + 2880 + 110 - 51 - 3520

281, 7914 + 2979 20

15