

Вариант 110202

1) Вычислите $(1\frac{2}{3} + \frac{3}{8}) \cdot 24 = (\frac{5}{3} + \frac{3}{8}) \cdot 24 = \frac{40+9}{24} \cdot 24 = 49$

2) Найдите значение $\frac{0,6 \cdot 10^2}{3 \cdot 10^{-2}} = \frac{60 \cdot 10^2}{3} = 2000$

3) $300 - 100\%$
 $x - 106\%$ $x = \frac{300 \cdot 106}{100} = 318$

4) $P = I^2 R$ $P = 1,5^2 \cdot 48 = 2,25 \cdot 48 = 108$

5) Найдите $\sin x$ $90^\circ < x < 180^\circ$ $\cos x = \sqrt{1 - \sin^2 x} = \sqrt{1 - (0,8)^2} = 0,6$

6) $80 \cdot 8 = 640$

$640 : 100 = 6,4 \Rightarrow 7$

7) $x^2 + 6 = 5x \Rightarrow x^2 - 5x + 6 = 0$ $\begin{cases} x=3 \\ x=2 \end{cases} \Rightarrow x=3$

8) $30 \cdot 4 = 120$

9)

A	B	C	D
3	2	4	1

10) $4 + 7 + 6 = 20$ $\frac{7}{20} = 0,35$

11) 18

12) $3100 \cdot 12 \cdot 11 = 409200$
 $4000 \cdot 12 \cdot 8 = 384000$
 $7600 \cdot 12 \cdot 5 = 456000$

13) $V = \pi R^2 H$ $H = 80$
 R в 2 раза \Rightarrow площадь в 4 раза \Rightarrow
 $H_1 = 80 : 4 = 20$

14)

A	B	C	D
3	2	4	1


15) $12\sqrt{7} = \frac{1}{2} 6 \cdot AC$

$AC = 4\sqrt{7}$

$AM = 2\sqrt{7}$

$AB^2 = AM^2 + BM^2 = (2\sqrt{7})^2 + 6^2 = 28 + 36 = 64$

$AB = 8$

16)  $AH = \sqrt{20^2 - 12^2} = 16$
 $AC = 32$
 $S_{\text{сер}} = 32 \cdot 8 = 256$

17)

A	B	C	D
1	3	4	2

18) 23

19) 115650

20) $\begin{cases} 5z = 6c + 1u \\ 8c = 6z + 1u \end{cases} \begin{matrix} \cdot 6 \\ \cdot 5 \end{matrix}$

$\begin{cases} 30z = 36c + 6u \\ 40c = 30z + 5u \end{cases}$

$40c = 36c + 6u + 5u$

$4c = 11u \quad | \cdot 5$

$20c = 55u \Rightarrow 20c$