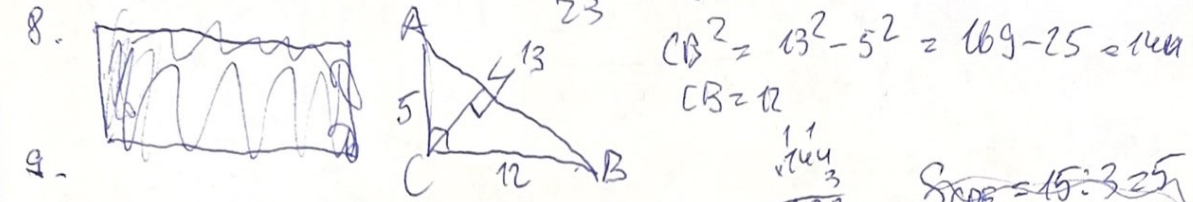


Шифр 101

Внесите в таблицу номера правильных ответов. В заданиях, в которых отсутствуют варианты ответов, внесите правильный ответ.

1	2	3	4	5	6	7	8	9	10
2	4	1	8	1	2	3	2	5	3
+	+	-	-	-	+	-	+	+	-
11	12	13	14	15	16	17	18	19	20
4	1	2	5	5	1	10	2700	6	1
+	+	+	-	+	+	-	-	-	-

7. $x^2 - 16x + 28 = 0$
 $D = 256 - 4 \cdot 28 = 256 - 112 = 144; \sqrt{D} = 12$
 $x_{1,2} = \frac{16 \pm 12}{2} = 14; 2$
 $\frac{(x-14)(x-2)}{23} - \frac{(x-14)(x-2)}{23} \leq 0$



9.

$S_{BCE} = 15 = S_{ADE}$
 $S_{ABCE} = 15 = 3 \cdot S_{CDE}$
 $S_{ADE} = 3 \cdot S_{ABE}$
 $S_{ABCD} = 4 \cdot S_{ABE} + 4 \cdot S_{CDE} = 20 + 20 = 40 \text{ m}^2$
 $30 + 10 = 40 \text{ m}^2$

10.

$3x^2 - 18\sqrt{3}x + 12\sqrt{3} = 0$
 $D = 324 \cdot 3 - 4 \cdot 3 \cdot 12\sqrt{3} = 324 \cdot 3 - 12 \cdot 12\sqrt{3}$
 $18 \cdot 18 \cdot 3 - 4 \cdot 3 \cdot 4 \cdot 3\sqrt{3} = 6 \cdot 3 \cdot 6 \cdot 3 - 3 - 4 \cdot 3 \cdot 3 \cdot 4\sqrt{3} = 27(3 \cdot 3 \cdot 3 - 4\sqrt{3}) = 27(27 - 4\sqrt{3})$

$3x^4 - 324x^2 + 144 = 0 \quad | :3$
 $x^4 - 108x^2 + 48 = 0$
 $x^2 = t; t \geq 0$
 $t^2 - 108t + 48 = 0$

$D = 11664 - 4 \cdot 48 = 11664 - 192 = 11472; \sqrt{D} = \sqrt{11472}$
 $t_{1,2} = \frac{108 \pm \sqrt{11472}}{2}$
 $x_{1,2} = \frac{11664 - 11472}{2} = \frac{192}{2} = 97$

11. $x^2 - 4x - nx + 2n - 1 = 0$
 $x(x-n) - 2(2x-n) = 1$

13. $8a - 2x = 0$ and $\sqrt{3x+36} = 0$
 $8 - 1 - 2x = 0 \Rightarrow x = -12$
 $2x = -8 \Rightarrow x = -4$
 $8 - 3 - 2x = 0 \Rightarrow 2x = -24 \Rightarrow x = -12$

14. $\sqrt{24x - 4x^2} = a$ 15. 8; 16; 24; 32; 40; 48; 56; 64;

$\sqrt{4x(6-x)} = a$ $4 \cdot 16 \cdot \frac{1}{2} = a_1 = 28; d = 8$

$\sqrt{24x - 4x^2} = a$ $a_{30} = 8 + 8(30-1) = 8 + 232 = 240$
 $\sqrt{4x(6-x)} = a$ $a_{35} = 8 + 8(35-1) = 280$

$24x - 4x^2 \geq 0$ $u-u - 24x - 4x^2 = 0$ $a_{36} = 288$
 $4x(6-x) \geq 0$ $u-u - 4x(6-x) = 0$ $36 + 15 = 51$

15. $x = 0$
 $x = 6$

$a_{15} = 8 + 8 \cdot 14 = 120$ $S_{51} = \frac{2a_1 + d(n-1)}{2} \cdot n =$

$\frac{2 \cdot 8 + 8 \cdot 50}{2} \cdot 51 = \frac{16 + 400}{2} \cdot 51 = 208 \cdot 51 = 20.$

$\begin{array}{r} \sqrt{208} \\ 51 \\ \hline 208 \\ 1540 \\ \hline 208 \end{array}$

$200 - 19 - 54 = 27 - 20 = 7$
 16% - менше.
 24% - акзе.
 30% - справе.

18. ~~137; 161; 185; 209; 233; 257; 281; 305~~

30; 183
 $a_1 = 30; d = 3$

$\begin{array}{r} 183 \\ - 27 \\ \hline 156 \end{array}$

$\begin{array}{r} 156 \overline{) 3} \\ - 15 \\ \hline 06 \\ \overline{) 6} \\ 6 \\ \hline 00 \end{array}$

19. m
 $\underline{I} - 202$
 $\underline{II} - 302$

$183 = 30 + 3(n-1)$
 $183 = 30 + 3n - 3$
 $3n = 156$ $a_{52} = 183$
 $n = \frac{156}{3} = 52$

$\begin{array}{r} 213 \\ \times 26 \\ \hline 1278 \\ 426 \\ \hline 5538 \end{array}$

$S_{52} = \frac{2a_1 + d(n-1)}{2} \cdot n = \frac{2 \cdot 30 + 3(52-1)}{2} \cdot 52 = \frac{60 + 3 \cdot 51}{2} \cdot 52 =$
 $= \frac{60 + 153}{2} \cdot 52 = \frac{213 \cdot 52}{2} =$

180K - 10%
 1800K - 100%
 $\begin{array}{r} \sqrt{18} \\ 50 \\ \hline 900 \\ \hline 1800 \end{array}$

17.
 B - 100%
 C - 70%
 D - 90%

18. Общ. масса - 100%
 Жир - 110%
 Дев - 150%
 (10%)