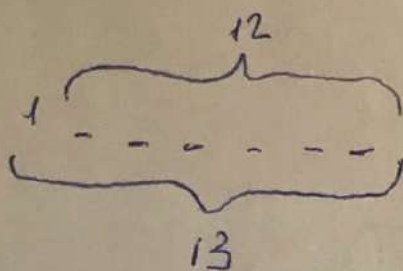


23 Вариант Амиров

1	C_{12}^8
2	C_{74}^9
3	$13 \cdot 14' - 13'' = 1368150120651$
4	bbccabcc
5	334
6	5264371
7	$N=12 \text{ или } N=23$
	$C_{16}^4 - 5 \cdot C_6^4 = 1745$
8	$\frac{77}{95}$



№1

$$9 - 1 = 8$$

Ответ: C_{12}^8

№2

$$x_1 + x_2 + \dots + x_{10} = 95, \quad x_i \geq 3$$

$$y_i \geq 1$$

$$y_1 + y_2 + \dots + y_{10} = 95 - 2 \cdot 10 = 75$$

Ответ: C_{74}^{29}

№3

~~Есть 2 группы ^{оруж.} ~~ноздр~~ = все - кем 2 группы ^{оруж.} ~~ноздр~~.~~

Есть 2 группы ^{оруж.} ~~ноздр~~ = все - кем 2 группы ^{оруж.} ~~ноздр~~

$$\text{Все} = 13 \cdot 14^{10}$$

$$\text{Кем 2 групп} = 13''$$

$$13 \cdot 14^{10} - 13'' = 1968150120651$$

Ответ: 1968150120651

$$A = \{a, b, c\}$$

N 4

$$\begin{array}{r} 1194 \overline{) 3} \\ \underline{3} \\ 29 \\ \underline{27} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

$$1122020 - 1 = 1122019$$

Amber: $bbccabcb$

25

$$\{A\} = 490$$

$$\{\overline{3}\} \cup \{11\}$$

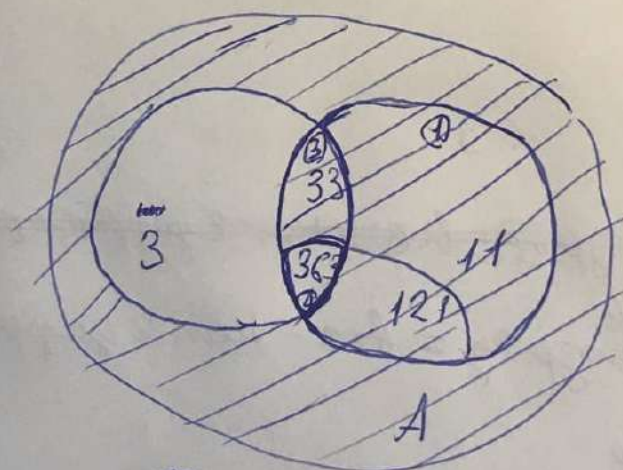
$$\{11\} = 258$$

$$\{3\} = 103$$

$$\{121\} = 54$$

$$\{33\} = 102$$

$$\{363\} = 47$$



$$\# \{B\} = 490 - 103 = 387$$

24 24 24 24 24
31 1025

W.B. Fugate

Qmbem: 334

$$490 - 258 = 232$$
$$232 + 102 = 334$$

N7

$$x_i \in [0; 7]$$

1. $N = ?$

$$x_1 + x_2 + 9 = x_3 + x_4 + x_5$$

$$1) \begin{cases} x_i = a_i, & i \leq 2 \\ x_i = 7 - a_i, & i > 2 \end{cases}$$

$$a_1 + a_2 + 9 = 7 - a_3 + 7 - a_4 + 7 - a_5$$

$$a_1 + a_2 + a_3 + a_4 + a_5 = 12$$

$$N = 12$$

Answer: $N = 12$ when $N = 23$

$$\begin{cases} x_i = 7 - a_i, & i \leq 2 \\ x_i = a_i, & i > 2 \end{cases}$$

$$7 - a_1 + 7 - a_2 + 9 = a_3 + a_4 + a_5$$

$$23 = a_1 + a_2 + a_3 + a_4 + a_5$$

$$N = 23$$

$$2. \lfloor a_1 + a_2 + a_3 + a_4 + a_5 = 12$$

$$1) a_i \geq 0 \Rightarrow \binom{5-1}{12+5-1} = \binom{4}{16}$$

$$a_i \geq 7$$

$$2) a'_1 = a_1 - 7$$

$$a'_1 + a_2 + a_3 + a_4 + a_5 = 5$$

$$\binom{5-1}{5+5-1} = \binom{4}{9}$$

$$\text{Answer: } \binom{4}{16} - 5 \cdot \binom{4}{9} = 1820 - 5 \cdot 70 = 1745$$