

Красюков А. 8 баp

Омбернел

1	C_{21}^{17}
2	C_{219}^{83}
3	14^4
4	62282
5	301
6	4617253
7	$(8C_{13}^4 - 5C_9^4) N=9 \text{ или } 11$
8	$\frac{117}{253}$

$$1) \quad x < 2^{22}$$

$$\underbrace{100 \dots 1}_{22}$$

$$\binom{17}{20} \quad \binom{17}{21}$$

$$2) \quad x_1 + x_2 + x_3 \dots + x_{90} = 40 \quad x \geq -1$$

$$y_1 + y_2 \dots + y_{90} = 220 \quad y = x_i + 2$$

$$3) \quad \text{Ombes: } \binom{89}{219}$$

$$14 \cdot 14 \cdot 14 \cdot 14 = 14^4 =$$

$$4) \quad a=0 \quad b=1 \quad c=2 \quad d=3$$

$$ddad6ac6 = 33031021$$

$$1 + 2 \cdot 4 + 0 \cdot 4^2 + 1 \cdot 4^3 + 3 \cdot 4^4 + 0 \cdot 4^5 + 3 \cdot 4^6 + 3 \cdot 4^7 = 1 + 8 + 0 + 64 + 768 + 0 + 12288 + 49152 =$$

$$= 62281 + 1 = 62282$$

$$5) \quad (A) = 320$$

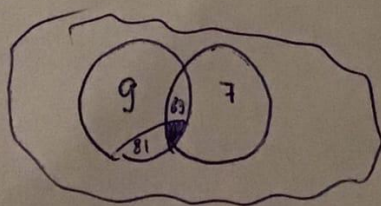
$$(9) = 145$$

$$(7) = 55$$

$$(81) = 43$$

$$(63) = 47$$

$$(567) = 28$$



$$A - (63) + (567) = 3081$$

$$\text{Ombem: } 3081$$

$$1) \quad x < 2^{22}$$

$$8) \quad \begin{aligned} p_1 &= 33 \\ p_2 &= 3K \\ p_3 &= KK \\ p_4 &= KK \end{aligned}$$

$$p_1 + p_2 + p_3 + p_4 = 1$$

$$p_2 + p_3 + p_4 = 1 - p_1$$

$$p_1 = \frac{17 \cdot 16}{23 \cdot 22} = \frac{136}{253}$$

$$p_2 + p_3 + p_4 = 1 - \frac{136}{253} = \frac{117}{253}$$

$$\text{Ombem: } \frac{117}{253}$$

7)

$$x_1 x_2 x_3 x_4 x_5 \quad x \in [0; 4]$$

$$A) \{x_1 + x_2 + x_3 - 1 = x_4 + x_5\}$$

B) $N = ?$

$$\begin{aligned} \textcircled{1} \quad & \begin{cases} x_i = a_i & i \leq 3 \\ x_i = 4 - a_i & i > 3 \end{cases} \quad \textcircled{2} \quad \begin{cases} x_i = 4 - a_i & i \leq 3 \\ x_i = a_i & i > 3 \end{cases} \end{aligned}$$

$$\textcircled{1} \quad a_1 + a_2 + a_3 - 1 = 4 - a_4 + 4 - a_5$$

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

$$\textcircled{2} \quad 4 - a_1 + 4 - a_2 + 4 - a_3 = a_4 + a_5 + 1 = 11$$

прогнани.
на срег. стр.
→→

$$\begin{aligned} 59 & \\ 26 & : 2 = 13 \text{ } 0 \\ 13 & : 3 = 4 \text{ } 1 \\ 44 & : 4 = 11 \text{ } 0 \\ 11 & : 5 = 2 \text{ } 1 \\ 22 & : 6 = 3 \text{ } 4 \\ 3 & : 7 = 0 \text{ } 3 \end{aligned}$$

$$\begin{aligned} 3 & 7 6 5 4 3 2 1 \\ 4 & 7 6 5 3 2 1 \\ 0 & 7 5 3 2 1 \\ 3 & 7 5 3 2 \\ 0 & 5 3 2 \\ 0 & 5 3 \\ 0 & 3 \end{aligned}$$

$$\begin{aligned} 4 \\ 6 \\ 1 \\ 7 \\ 2 \\ 5 \\ 3 \end{aligned}$$

$$\text{Ombem: } 46173$$

7) предположение

1. $a_i \geq 0 \Rightarrow C_{13}^4$

2. $q > 5$ $a_1 + a_2 + \dots + a_9 = 9 - q = 5 \Rightarrow C_{13}^4$

Ответ: $C_{13}^4 - 5C_9^4$