Agar A={1,2}, B={*a*,*b*} bo‘lsa, ularning Dekart ko‘paytmasi to‘plam qayerda to‘gri ifodalangan ?
B×A ={(*a*,1), (*a*,2), (*b*,1), (*b*,2)}
B×A={1,2,*a*,*b*}
B×A ={(1,*a*), (2,*b*)}
B×A ={(*a*,1), (*b*,2)}

Quyidagi belgilar ketma-ketliklarining qaysi biri formula bo‘ladi?
$((A \leftrightarrow B) \wedge \neg A)$
$(A \to B)\neg \vee B$
$\neg(A \vee B) \to \neg B$)
$(\neg B \to \vee A)$

Quyidagi belgilar ketma-ketliklarining qaysi biri formula bo‘ladi?
$((B \to (A \wedge C)) \wedge \neg(A \vee C))$
$(A \to \vee(B \wedge C))$
$\neg(\to B \vee C) \wedge A, D)$
$(\neg(A \to B) \vee \neg C))$

Quyidagi belgilar ketma-ketliklarining qaysi biri formula bo‘lmaydi?
$\neg(\to B \vee C) \wedge A, D)$
$((A \leftrightarrow B) \wedge \neg A)$
$((A \leftrightarrow B) \wedge \neg(A \vee \tilde{N}))$
$((A \to B) \vee A)$

Quyidagi belgilar ketma-ketliklarining qaysi biri formula bo‘lmaydi?
$(B \vee C) \wedge AD)$
$(\neg(B \vee C) \wedge (A \vee D))$
$(\neg(B \vee C) \wedge A)$
$((B \vee C) \wedge (A \vee \neg D))$

$F \equiv (A \to B) \to (\neg B \to \neg A)$ formulaning barcha qism formulalarini yozing.
$A,B,\neg A,\neg B,(A \to B),$ $(\neg B \to \neg A),F$
$A,B,(A \to B),(\neg B \to \neg A)$
$(A \to B),(\neg B \to \neg A)$
A, B

$F \equiv (((A \vee B) \wedge \neg C) \to (A \wedge B))$ formulaning barcha qism formulalarini yozing.
$A,B,C,\neg C,(A \vee B),$ $(A \wedge B),((A \vee B) \wedge \neg C),F$
$A,B,(A \vee B),$ $(A \wedge B),F$
$(A \to B),(\neg B \to \neg A)$
A, B

Quyidagi ikki o‘zgaruvchili formulalarning qaysi biri keltirilgan formula?
$(A \vee \neg B) \wedge \neg C$
$(A \to \neg B)$
$\neg(A \wedge B) \to C$
$((\neg A \to B) \vee (\neg C \to \neg B))$

Quyidagi uch o‘zgaruvchili formulalarning qaysi biri keltirilgan formula?
$((\neg A \wedge B) \vee \neg C)$
$((\neg A \to B) \vee (\neg C \to \neg B))$
$((A \to B) \vee C)$
$((\neg A \wedge B) \vee (\neg C \to \neg B))$

Quyidagi uch o‘zgaruvchili formulalarning qaysi biri keltirilgan formula?
$((\neg A \wedge B) \vee (\neg C \wedge \neg B))$
$((\neg A \wedge B) \vee (\neg C \to \neg B))$
$((\neg A \wedge B) \to (\neg C \wedge \neg B))$
$((\neg A \wedge B) \vee (\neg C \to \neg B))$

Quyidagi formulalarning qaysi biri DNF bo‘ladi?
$((\neg A \wedge B) \vee (\neg C \wedge \neg B))$
$((\neg A \wedge B) \vee (\neg C \to \neg B))$
$((\neg A \to B) \vee (\neg C \to \neg B))$
$(\neg(\neg A \wedge B) \vee \neg(\neg C \wedge \neg B))$

Quyidagi ketma-ketliklardan qaysi biri formula bo‘ladi.
$((A \wedge B) \vee C)$
$A \vee B(C \wedge D)$
$(A\neg B) \to C$
$(A\wedge \to B) \vee C$

Quyidagi ketma-ketliklardan qaysi biri formula bo‘ladi.
$((\neg A \wedge B) \to (B \vee C))$
$(\vee B \wedge C) \to A$
$A \to (B \vee C)$
$A \wedge B) \to C$

O‘ziga o‘zi qo‘shma uch o‘zgaruvchili funksiyalar soni qancha?
16
64
36
23

Uch o‘zgaruvchili Bul funksiyalar soni qancha?
256
32
64
128

Nolni saqlovchi uch o‘zgaruvchili funksiyalar soni qancha?

128
32
64
256

Agar $A=\{1,2,3,4\}$, $B=\{3,4,5,8,9\}$ bo‘lsa, $A\cup B$ to‘plam qanday elementlardan iborat?
$\{1,2,3,4,5,8,9\}$
$\{3,4\}$
$\{3,2,4\}$
$\{1,2,8,9\}$

Agar $A=\{2,3,5,7\}$, $B=\{5,7,8,9\}$ bo‘lsa, $A\cap B$ to‘plam qanday elementlardan iborat?
$\{5,7\}$
$\{8,9\}$
$\{2,3,5,7,8,9\}$
$\{2,3\}$

Agar $A=\{1,2,3,5,8\}$, $B=\{3,5,7,8,9\}$ bo‘lsa, $A\setminus B$ to‘plam qanday elementlardan iborat?
$\{1,2\}$
$\{7,9\}$
$\{3,5,8\}$
$\{1,2,8,9\}$

Tenglamalar sistemasini yeching $\begin{cases} xy=\bar{x}\to y \\ x\vee y=x \end{cases}$
$(0,0)$ *ва* $(1,1)$
$(1,1)$
$(0,1)$ *ва* $(1,0)$
$(0,0)$

Quyidagi belgilar ketma-ketliklarining qaysi biri formula bo‘ladi?
$((C\leftrightarrow B)\wedge\neg B)$
$(A\to C)\neg\vee C$
$\neg(A\vee B)\to\neg B\ )$
$(\neg B\to\vee A)$

$(((A\to\neg B)\to B)\wedge(\neg A\vee B))$ formula propozitsional o‘zgaruvchilar tanlanmalarining nechtasida rost qiymat qabul qiladi.
2 ta
0 ta
1 ta
3 ta

Agar U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={2,3,4,5} bo‘lsa, A∪B to‘plam qanday elementlardan iborat?
{1,2,3,4,5}
{0,1,9}
{1,4,5}
{6,7,8,9}

Agar U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={2,3,4,5} bo‘lsa, A∩B to‘plam qanday elementlardan iborat?
{2,3}
{1,5,7}
{4,5}
{0,1,2}

Agar U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={2,3,4,5} bo‘lsa, A\B ayirma qanday elementlardan iborat?
{1}
{4,5}
Ø
{0,2,3,4,5,6,7,8,9}

Agar U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={2,3,4,5} bo‘lsa, $A \setminus \overline{B}$ to‘plam qanday elementlardan iborat?
{2,3}
{1}
{1,2,3}
{2,3,4,5}

Agar U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={2,3,4,5}bo‘lsa, $\overline{A \setminus B}$ to‘plam qanday elementlardan iborat?
{0,2,3,4,5,6,7,8,9}
{6,7,8,9,}
{0,1,2,3,4,5}
{1,2,3,4,5}

Berilgan: U={0,1,2,3,4,5,6,7,8,9}, A={0,2,3}, B={2,3,4,5}. A∪B-toping.
{0,2,3,4,5}
{4,5}
Ø
{0,2,3,4,5,6,7,8,9}

Berilgan: U={0,1,2,3,4,5,6,7,8,9}, A={0,2,3}, B={0,2,3,4,5}. A∩B -toping.
{0,2,3}
{1}
{1,2,3}
{2,3,4,5}
Berilgan: U={0,1,2,3,4,5,6,7,8,9}, A={1,2,3}, B={1,3,4,5}. A\B -toping.
{2}
{6,7,8,9,}

{0,1,2,3,4,5}
{1,2,3,4,5}

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar harorat noldan yuqori bo‘lsa, unda muz eriydi va daraxt bo‘lagi suzadi».
$A\rightarrow(B\wedge C)$
$A\wedge B$
$A\leftrightarrow B$
$A\rightarrow B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Son juft bo‘ladi faqat va faqat shunda, qachonki u ikkiga bo‘linsa».
A)$A\leftrightarrow B$
B)$A\rightarrow B$
C)$A\wedge B$
D)$\neg A\wedge B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar uchburchakning burchaklari har hil bolsa, u holda u na teng yonli va na teng tomonli bo‘ladi».
$A\rightarrow(\neg B\wedge\neg C)$
$A\wedge B$
$\neg A\leftrightarrow B$
$A\wedge\neg B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar bugun imtihon olinmasa, unda kinoga yoki parka boraman».
$A\rightarrow(B\vee C)$
B)$\neg(A\vee B)$
C)$\neg(A\rightarrow B)$
D) $(A\wedge B)$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar havo quyoshli va issiq bo‘lsa, unda insonninig kayfiyati yaxshi bo‘ladi».
$(A\wedge B)\rightarrow C$
$(A\vee B)$
$\neg(A\leftrightarrow B)$
$A\rightarrow(B\vee C)$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar uchburchakning burchaklari orasida tenglari bolsa, u holda u teng yonli yoki teng tomonli bo‘ladi».
$A\rightarrow(B\vee C)$
$\neg A\wedge B$
$A\rightarrow(\neg B\wedge\neg C)$
$A\leftrightarrow B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar talaba biletning javobini bilmasa va ko‘chirolmasa, u holda u ikki baho oladi».
$(\neg A\wedge\neg B)\rightarrow C$
$(A\wedge B)\rightarrow C$

$\neg A \wedge \neg B$
$A \rightarrow (\neg B \wedge \neg C)$

Berilgan mulohazani formula ko‘rinishida ifodalang:«Agar dars bo‘lmasa, unda uyga boraman va dush qabul qilaman».
$\neg A \rightarrow (B \wedge C)$
$A \leftrightarrow \neg B$
$\neg (A \wedge B)$
$\neg A \vee B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Son juft bo‘lmaydi faqat va faqat shunda, qachonki u ikkiga bo‘linmasa».
$\neg A \leftrightarrow \neg B$
$\neg A \rightarrow B$
$\neg (A \wedge B)$
$\neg A \wedge B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar to‘rtburchakda teng burchaklar mavjud bo‘lsa, unda u kvadrat yoki to‘g‘ri burchakli to‘rtburchak yoki romb bo‘ladi».
$A \rightarrow (B \vee C \vee D)$
$\neg A \wedge B$
$A \wedge \neg B$
$A \leftrightarrow \neg B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar imtihon qoldirilsa, unda bugun kinoga so‘ng basseynga boraman».
$A \rightarrow (B \wedge C)$
$(A \leftrightarrow B)$
$A \wedge B$
$A \vee B$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar ishlar yaxshi ketsa, unda insonning kayfiyati yaxshi bo‘ladi».
$B \rightarrow C$
$A \vee B$
$\neg A \leftrightarrow B$
$A \rightarrow (B \wedge C)$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar to‘rtburchakning tomonlari teng bo‘lsa, unda u kvadrat yoki romb».
$A \rightarrow (B \vee C)$
$\neg A \wedge B$
$A \rightarrow (\neg B \wedge \neg C)$
$\neg (A \wedge B)$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Agar talaba bilet javoblarini bilsa va qo‘shimcha savollarga javob bersa, unda u besh baho oladi».
$(A \wedge B) \rightarrow C$
$(A \wedge B) \rightarrow C$

$\neg A \wedge \neg B$
$A \rightarrow (\neg B \wedge \neg C)$

Berilgan mulohazani formula ko‘rinishida ifodalang: «Bugun tushlikda palov bo‘lmasa, somsa yeyman».
$\neg A \rightarrow B$
$\neg A \wedge B$
$A \rightarrow (B \vee C)$
$\neg (A \wedge B$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$\overline{x_1 \vee x_2} \vee (\bar{x}_2 \vee x_3)$
$\overline{x_1 \wedge x_2} \vee (\bar{x}_2 \wedge x_3)$
$(x \vee y) \wedge (x \vee \bar{y})$
$(x \wedge y) \oplus 1$

Bul funksiyalaridan qaysi VA-EMAS amallari yordamida berilgan?
$x \wedge \overline{(\bar{x} \wedge \bar{y})}$
$x \oplus y \oplus z \oplus 1$
$(\bar{x}_1 \wedge x_2) \vee (\bar{x}_1 \wedge \bar{x}_2)$
$(\bar{x}_1 \vee x_2) \wedge (\bar{x}_1 \vee \bar{x}_2)$

Bul funksiyalaridan qaysi Jegalkin yig‘indi ko‘rinishida berilgan?
$x \wedge y \oplus z \oplus 1$
$\overline{(\bar{x} \vee \bar{y})} \vee x \wedge \bar{y}$
$\overline{(x \wedge y)} \vee \bar{x} \wedge \bar{y}$
$x \wedge (\bar{x} \vee \bar{y})$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$x \vee \overline{(\bar{y} \vee z)} \vee y$
$x \wedge (\bar{y} \vee z) \vee y \wedge (z \vee \bar{x})$
$x \wedge y \oplus z \oplus 1$
$\overline{(x \wedge y)} \vee \bar{x} \wedge \bar{y}$

Bul funksiyalaridan qaysi VA-EMAS amallari yordamida berilgan?
$\overline{(\bar{x} \wedge z)} \wedge x \wedge y$
$x \oplus y \oplus z \oplus 1$
$\overline{(\bar{x} \vee \bar{y})} \vee x \wedge \bar{y}$
$(\bar{x}_1 \vee x_2) \wedge (\bar{x}_1 \vee \bar{x}_2)$

Bul funksiyalaridan qaysi Jegalkin yig‘indi ko‘rinishida berilgan?
$x \wedge y \wedge z \oplus x \wedge y \oplus 1$
$x \wedge y \wedge z \vee x \wedge \bar{y}$
$(x \vee y) \wedge (x \vee \bar{y}) \vee x$
$(\overline{\bar{x} \vee \bar{y}}) \vee x \wedge \bar{y}$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$\overline{x \vee (\bar{x} \vee \bar{y})}$
$x \wedge (\bar{x} \vee \bar{y})$
$(y \wedge z) \vee (\bar{x} \wedge y \wedge z)$
$(\bar{x} \vee y) \wedge (x \vee \bar{y})$

Bul funksiyalaridan qaysi VA-EMAS amallari yordamida berilgan?
$x \wedge (\bar{x} \wedge \bar{y})$
$x_1 \wedge \bar{x}_3 \vee x_2$
$x \wedge y \wedge z \oplus x \wedge y \oplus 1$
$x \wedge (\bar{x} \vee \bar{y})$

Bul funksiyalaridan qaysi Jegalkin yig‘indi ko‘rinishida berilgan?
$x \wedge y \oplus z \oplus 1$
$\overline{(x \wedge y)} \vee \bar{x} \wedge \bar{y}$
$\overline{(\bar{x} \vee \bar{y})}$
$y \wedge (x \vee \bar{y}) \vee x$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$\overline{x_1 \vee x_2}$
$y \wedge z \vee x \wedge \bar{y}$
$(x \wedge y) \oplus y$
$x_1 \wedge \bar{x}_3 \vee x_2$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$\overline{x_1 \vee x_2} \vee (\bar{x}_2 \vee \bar{x}_3)$
$\overline{x_1 \vee x_2} \vee (\bar{x}_2 \wedge x_3)$
$(x \vee y) \wedge \overline{(x \vee \bar{y})}$
$(x \wedge y) \oplus 1$
Bul funksiyalaridan qaysi VA-EMAS amallari yordamida berilgan?
$x \wedge \overline{(x \wedge y)}$
$x \oplus y \oplus z$

$(x_1 \wedge x_2) \vee (\bar{x}_1 \wedge \bar{x}_2)$
$(x_1 \vee x_2) \wedge (\bar{x}_1 \vee \bar{x}_2)$

Bul funksiyalaridan qaysi Jegalkin yig‘indi ko‘rinishida berilgan?
$x \wedge y \oplus 1$
$\overline{(\bar{x} \vee \bar{y})} \vee x \wedge \bar{y}$
$\overline{(x \wedge y)} \vee x \wedge y$
$x \wedge \overline{(\bar{x} \vee \bar{y})}$

Bul funksiyalaridan qaysi YOKI-EMAS amallari yordamida berilgan?
$x \vee \overline{(\bar{y} \vee z)} \vee \bar{y}$
$\overline{(\bar{y} \vee z)} \vee y \wedge (z \vee \bar{x})$
$x \wedge y \oplus y$
$\overline{(x \vee y)} \vee \bar{x} \wedge \bar{y}$

Bul funksiyalaridan qaysi VA-EMAS amallari yordamida berilgan?
$\overline{(\bar{x} \wedge z)} \wedge \bar{x} \wedge y$
$\overline{(\bar{x} \wedge \bar{y})} \vee x \wedge \bar{y}$
$\overline{(\bar{x}_1 \vee x_2)} \wedge (\bar{x}_1 \vee \bar{x}_2)$
$y \oplus z \oplus 1$