1. Quyidagi qiymatlar satrida F funksiya 0 qiymatni qabul qilsa, MKNSh dan foydalanib, F ni toping.

1) $F(0,1) = F(1,1) = 0;$

2) $F(0,1) = 0;$

3) $F(0,1,1) = F(1,1,1) = 0;$

4) $F(1,0,0) = F(1,0,1) = 0;$

5) $F(0,1,1) = F(0,0,0) = F(0,1,0) = 0;$

6) $F(1,1,1) = F(0,0,1) = F(1,1,0) = F(1,0,0) = 0;$

2. Quyidagi mulohazalar algebrasi formulalarining har biri uchun chinlik jadvalini tuzib, MDN shaklini toping:

1) $X \rightarrow Y;$

2) $(X \wedge Y) \wedge Z;$

3) $(X \leftrightarrow Z) \rightarrow (X \wedge \neg Y);$

4) $X \vee (Y \rightarrow (Z \leftrightarrow (X \wedge Y)));$

5) $((X \wedge \neg Y) \vee Z) \wedge T;$

6) $(X \leftrightarrow Y) \wedge (Y \leftrightarrow Z) \wedge (Z \leftrightarrow T);$

3. Quyidagi mulohazalar algebrasi formulalarining har biri uchun chinlik jadvalini tuzib, MKN shaklini toping:

1) $(\neg Z \rightarrow \neg Y) \rightarrow ((X \wedge \neg Z) \wedge Y);$

2) $(X \leftrightarrow Y) \wedge (\neg Z \rightarrow (T \wedge \neg X));$

3) $((X \vee \neg Z) \wedge Y) \leftrightarrow ((Y \vee \neg X) \wedge Z);$

4) $\neg(X \wedge Y) \rightarrow \neg(X \vee Z).$

4. 1. Quyidagi berilgan formulalarning chinlik to'plamini toping:

1) $A = xy \vee x\overline{y} \vee \overline{x}y;$

2) $B = (x \vee \overline{y})(\overline{x} \vee y)(\overline{x} \vee \overline{y});$

3) $C = xyz \vee \overline{x}yz \vee x\overline{yz};$

4) $D = (x \vee y \vee \bar{z})(\bar{x} \vee y \vee z)(x \vee \bar{y} \vee \bar{z})$;

2. Yuqorida keltirilgan formulalardan tuzilgan $A \vee B$, $A \wedge D$, $A \leftrightarrow F$, $C \rightarrow D$, $C \leftrightarrow B$, $A \rightarrow B \rightarrow C$ $A \leftrightarrow M \leftrightarrow J$ murakkab formulalarning chinlik to'plamini toping.