

# Упрощение совершенной дизъюнктивной нормальной формы

Упростить совершенную дизъюнктивную нормальную форму.

**Задача 13.1.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xyz$$

**Задача 13.2.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}yz \vee \bar{x}\bar{y}z \vee xyz \vee xy\bar{z} \vee xyz$$

**Задача 13.3.**

8

$$\bar{x}\bar{y}\bar{z} \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.4.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}yz \vee \bar{x}\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.5.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z}$$

**Задача 13.6.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}y\bar{z} \vee x\bar{y}\bar{z} \vee xy\bar{z} \vee xyz$$

**Задача 13.7.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.8.**

8

$$\bar{x}\bar{y}z \vee \bar{x}yz \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.9.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xyz$$

**Задача 13.10.**

8

$$\bar{x}y\bar{z} \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.11.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xyz$$

**Задача 13.12.**

8

$$\bar{x}yz \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.13.**

8

$$\bar{x}yz \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.14.**

8

$$\bar{x}y\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.15.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xyz$$

**Задача 13.16.**

8

$$\bar{x}\bar{y}\bar{z} \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z}$$

**Задача 13.17.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z}$$

**Задача 13.18.**

8

$$\bar{x}\bar{y}\bar{z} \vee x\bar{y}\bar{z} \vee xy\bar{z} \vee xyz$$

**Задача 13.19.**

8

$$\bar{x}\bar{y}\bar{z} \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xyz$$

**Задача 13.20.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z}$$

**Задача 13.21.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z}$$

**Задача 13.22.**

8

$$\bar{x}\bar{y}\bar{z} \vee x\bar{y}\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.23.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.24.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.25.**

8

$$\bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.26.**

8

$$\bar{x}\bar{y}z \vee \bar{x}yz \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.27.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.28.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}y\bar{z} \vee \bar{x}yz \vee xy\bar{z} \vee xyz$$

**Задача 13.29.**

8

$$\bar{x}\bar{y}z \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.30.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee x\bar{y}\bar{z} \vee xy\bar{z} \vee xyz$$

**Задача 13.31.**

8

$$\bar{x}\bar{y}z \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.32.**

8

$$\bar{x}\bar{y}\bar{z} \vee \bar{x}\bar{y}z \vee \bar{x}yz \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.33.**

8

$$\bar{x}y\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Задача 13.34.**

8

$$\bar{x}yz \vee x\bar{y}\bar{z} \vee x\bar{y}z \vee xy\bar{z} \vee xyz$$

**Упрощение совершенной дизъюнктивной нормальной формы**

1	$xz \vee \bar{y}$	1, 1, 0, 0, 1, 1, 0, 1
2	$\bar{x} \vee y \vee z$	1, 1, 1, 1, 0, 1, 1, 1
3	$\bar{z}\bar{y} \vee x$	1, 0, 0, 0, 1, 1, 1, 1
4	$\bar{x} \vee y \vee \bar{z}$	1, 1, 1, 1, 1, 0, 1, 1
5	$\bar{x}z \vee y\bar{z}$	0, 1, 1, 1, 0, 0, 1, 0
6	$xy \vee \bar{z}$	1, 0, 1, 0, 1, 0, 1, 1
7	$\bar{x}z \vee y$	0, 1, 1, 1, 0, 0, 1, 1
8	$xy \vee z$	0, 1, 0, 1, 0, 1, 1, 1
9	$\bar{x}\bar{z} \vee y$	1, 0, 1, 1, 0, 0, 1, 1
10	$\bar{z}y \vee x$	0, 0, 1, 0, 1, 1, 1, 1
11	$zy \vee \bar{x}$	1, 1, 1, 1, 0, 0, 0, 1
12	$zy \vee x$	0, 0, 0, 1, 1, 1, 1, 1
13	$x\bar{z} \vee yz$	0, 0, 0, 1, 1, 0, 1, 1
14	$xz \vee y\bar{z}$	0, 0, 1, 0, 0, 1, 1, 1
15	$zy \vee \bar{x}$	1, 1, 1, 1, 0, 0, 0, 1
16	$xz \vee \bar{y}\bar{z}$	1, 0, 0, 0, 1, 1, 0, 1
17	$\bar{x}z \vee y\bar{z}$	0, 1, 1, 1, 0, 0, 1, 0
18	$xy \vee \bar{y}\bar{z}$	1, 0, 0, 0, 1, 0, 1, 1
19	$xz \vee \bar{y}\bar{z}$	1, 0, 0, 0, 1, 1, 0, 1
20	$\bar{x}z \vee y\bar{z}$	0, 1, 1, 1, 0, 0, 1, 0
21	$\bar{x}z \vee y\bar{z}$	0, 1, 1, 1, 0, 0, 1, 0
22	$\bar{x}\bar{z} \vee y$	1, 0, 1, 1, 0, 0, 1, 1
23	$\bar{x} \vee \bar{y} \vee z$	1, 1, 1, 1, 1, 1, 0, 1
24	$\bar{x}\bar{y} \vee z$	1, 1, 0, 1, 0, 1, 0, 1
25	$\bar{x}z \vee y$	0, 1, 1, 1, 0, 0, 1, 1
26	$xy \vee z$	0, 1, 0, 1, 0, 1, 1, 1
27	$\bar{x}\bar{z} \vee y$	1, 0, 1, 1, 0, 0, 1, 1
28	$\bar{x}y \vee \bar{z}$	1, 0, 1, 1, 1, 0, 1, 0
29	$z\bar{y} \vee x$	0, 1, 0, 0, 1, 1, 1, 1
30	$\bar{x}\bar{y} \vee xz$	1, 1, 0, 0, 0, 1, 0, 1
31	$z\bar{y} \vee x$	0, 1, 0, 0, 1, 1, 1, 1
32	$x \vee \bar{y} \vee z$	1, 1, 0, 1, 1, 1, 1, 1
33	$xz \vee y\bar{z}$	0, 0, 1, 0, 0, 1, 1, 1
34	$zy \vee x$	0, 0, 0, 1, 1, 1, 1, 1