

# Упрощение совершенной дизъюнктивной нормальной формы

Упростить совершенную дизъюнктивную нормальную форму.

**Задача 13.1.**

3

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

**Задача 13.2.**

3

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

**Задача 13.3.**

3

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

**Задача 13.4.**

3

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

**Задача 13.5.**

3

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

**Задача 13.6.**

3

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

**Задача 13.7.**

3

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

**Задача 13.8.**

3

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

**Задача 13.9.**

3

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

**Задача 13.10.**

3

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

**Задача 13.11.**

3

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

**Задача 13.12.**

3

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

**Задача 13.13.**

3

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

**Задача 13.14.**

3

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

**Задача 13.15.**

3

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

**Задача 13.16.**

3

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

**Задача 13.17.**

3

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

**Задача 13.18.**

3

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

**Задача 13.19.**

3

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

**Задача 13.20.**

3

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

**Задача 13.21.**

3

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

**Задача 13.22.**

3

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

**Задача 13.23.**

3

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

**Задача 13.24.**

3

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

**Задача 13.25.**

3

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

**Задача 13.26.**

3

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

**Задача 13.27.**

3

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

**Задача 13.28.**

3

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

**Задача 13.29.**

3

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

**Задача 13.30.**

3

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

**Задача 13.31.**

3

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

**Задача 13.32.**

3

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

**Задача 13.33.**

3

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

**Задача 13.34.**

3

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

**Упрощение совершенной дизъюнктивной нормальной формы**

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