

## Упрощение совершенной дизъюнктивной нормальной формы

Упростить совершенную дизъюнктивную нормальную форму.

**Задача 13.1.**

6

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

**Задача 13.2.**

6

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

**Задача 13.3.**

6

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

**Задача 13.4.**

6

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

**Задача 13.5.**

6

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

**Задача 13.6.**

6

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

**Задача 13.7.**

6

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

**Задача 13.8.**

6

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

**Задача 13.9.**

6

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

**Задача 13.10.**

6

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

**Задача 13.11.**

6

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

**Задача 13.12.**

6

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

**Задача 13.13.**

6

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

**Задача 13.14.**

6

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

**Задача 13.15.**

6

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

**Задача 13.16.**

6

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

**Задача 13.17.**

6

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

**Задача 13.18.**

6

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

**Задача 13.19.**

6

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

**Задача 13.20.**

6

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

**Задача 13.21.**

6

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

**Задача 13.22.**

6

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

**Задача 13.23.**

6

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

**Задача 13.24.**

6

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

**Задача 13.25.**

6

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

**Задача 13.26.**

6

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

**Задача 13.27.**

6

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

**Задача 13.28.**

6

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

**Задача 13.29.**

6

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

**Задача 13.30.**

6

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

**Задача 13.31.**

6

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

**Задача 13.32.**

6

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

**Задача 13.33.**

6

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

**Задача 13.34.**

6

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

## Упрощение совершенной дизъюнктивной нормальной формы

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