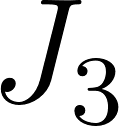
Вариант 21 0,1,2,3,4,11,12,13,14,15

*Таблица 1*

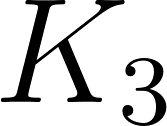
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | **0** | **0** | **0** | **0** | ***0*** | ***0*** | ***0*** | ***1*** | **0** | **\*** | **0** | **\*** | **0** | **\*** | **1** | **\*** |
| 1 | **0** | **0** | **0** | **1** | ***0*** | ***0*** | ***1*** | ***0*** | **0** | **\*** | **0** | **\*** | **1** | **\*** | **\*** | **1** |
| 2 | **0** | **0** | **1** | **0** | ***0*** | ***0*** | ***1*** | ***1*** | **0** | **\*** | **0** | **\*** | **\*** | **0** | **1** | **\*** |
| 3 | **0** | **0** | **1** | **1** | ***0*** | ***1*** | ***0*** | ***0*** | **0** | **\*** | **1** | **\*** | **\*** | **1** | **\*** | **1** |
| 4 | 0 | 1 | 0 | 0 | *1* | *0* | *1* | *1* | 1 | \* | \* | 1 | 1 | \* | 1 | \* |
| 5 | ... | ... | ... | ... | *...* | *...* | *...* | *...* | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | ... | ... | ... | ... | *...* | *...* | *...* | *...* | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 | ... | ... | ... | ... | *...* | *...* | *...* | *...* | ... | ... | ... | ... | ... | ... | ... | ... |
| 8 | **...** | **...** | **...** | **...** | ***...*** | ***...*** | ***...*** | ***...*** | **...** | **...** | **...** | **...** | **...** | **...** | **...** | **...** |
| 9 | **...** | **...** | **...** | **...** | ***...*** | ***...*** | ***...*** | ***...*** | **...** | **...** | **...** | **...** | **...** | **...** | **...** | **...** |
| 10 | **...** | **...** | **...** | **...** | ***...*** | ***...*** | ***...*** | ***...*** | **...** | **...** | **...** | **...** | **...** | **...** | **...** | **...** |
| 11 | **1** | **0** | **1** | **1** | ***1*** | ***1*** | ***0*** | ***0*** | **\*** | **0** | **1** | **\*** | **\*** | **1** | **\*** | **1** |
| 12 | 1 | 1 | 0 | 0 | *1* | *1* | *0* | *1* | \* | 0 | \* | 0 | 0 | \* | 1 | \* |
| 13 | 1 | 1 | 0 | 1 | *1* | *1* | *1* | *0* | \* | 0 | \* | 0 | 1 | \* | \* | 1 |
| 14 | 1 | 1 | 1 | 0 | *1* | *1* | *1* | *1* | \* | 0 | \* | 0 | \* | 0 | 1 | \* |
| 15 | 1 | 1 | 1 | 1 | *0* | *0* | *0* | *0* | \* | 1 | \* | 1 | \* | 1 | \* | 1 |

Минимизация:

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=J_%7B3%7D#0) =q2 (таблица 2)

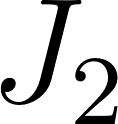
*Таблица 2*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 0 | 0 | 0 |
| 01 | 1 | - | - | - |
| 11 | \* | \* | \* | \* |
| 10 | - | - | \* | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=K_%7B3%7D#0) = q2q1q0 (таблица 3)

*Таблица 3*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | **\*** | **\*** | **\*** | **\*** |
| 01 | \* | - | - | - |
| 11 | 0 | 0 | 1 | 0 |
| 10 | - | - | 0 | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=J_%7B2%7D#0) = q1q0 | q3 (таблица 4)

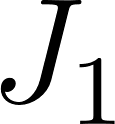
*Таблица 4*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 0 | 1 | 0 |
| 01 | \* | - | - | - |
| 11 | \* | \* | \* | \* |
| 10 | - | - | 1 | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=K_%7B2%7D#0) = q1q0 | ~q3 (таблица 5)

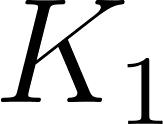
*Таблица 5*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | \* | \* | \* | \* |
| 01 | 1 | - | - | - |
| 11 | 0 | 0 | 1 | 0 |
| 10 | - | - | \* | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=J_%7B1%7D#0) = q0 | ~q3q2 (таблица 6)

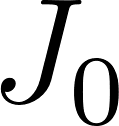
*Таблица 6*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 1 | \* | \* |
| 01 | 1 | - | - | - |
| 11 | 0 | 1 | \* | \* |
| 10 | - | - | \* | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=K_%7B1%7D#0) = q0 (таблица 7)

*Таблица 7*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | \* | \* | 1 | 0 |
| 01 | \* | - | - | - |
| 11 | - | - | 1 | - |
| 10 | \* | \* | 1 | 0 |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=J_%7B0%7D#0) = 1 (таблица 8)

*Таблица 8*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 1 | \* | \* | 1 |
| 01 | 1 | - | - | - |
| 11 | 1 | \* | \* | 1 |
| 10 | - | - | \* | - |

Карта Карно для [****](https://www.codecogs.com/eqnedit.php?latex=K_%7B0%7D#0) = 1 (таблица 9)

*Таблица 9*

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | \* | 1 | 1 | \* |
| 01 | \* | - | - | - |
| 11 | \* | 1 | 1 | \* |
| 10 | - | - | 1 | - |