$$F=\left(\left(\overbar{A}∧B\right)\rightarrow \left(B ∨C\right)\right)+\left(A \~ (\overbar{D} ∨E)\right)$$

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | ¬A ∧ B (1) | B ∨ C(2) | 1 → 2 (3) | ¬D ∨ E (4) | A ~ 4 (5) | F (3 + 5) |
| **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **1** |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| **0** | **0** | **0** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** |
| 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| **0** | **0** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **0** | **1** |
| 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| **0** | **0** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** |
| 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| **0** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **0** | **1** |
| 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| **0** | **1** | **0** | **1** | **0** | **1** | **1** | **1** | **0** | **1** | **0** |
| 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| **0** | **1** | **1** | **0** | **0** | **1** | **1** | **1** | **1** | **0** | **1** |
| 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| **0** | **1** | **1** | **1** | **0** | **1** | **1** | **1** | **0** | **1** | **0** |
| 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| **1** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **1** | **0** |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| **1** | **0** | **0** | **1** | **0** | **0** | **0** | **1** | **0** | **0** | **1** |
| 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| **1** | **0** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **0** |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| **1** | **0** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **0** | **1** |
| 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| **1** | **1** | **0** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **0** |
| 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| **1** | **1** | **0** | **1** | **0** | **0** | **1** | **1** | **0** | **0** | **1** |
| 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| **1** | **1** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **0** |
| 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| **1** | **1** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **0** | **1** |
| 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |