Tipp: Füge ggfs. zusätzliche Spalten ein

Kommutativgesetze

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | A $∧B$ | B $∧A$ |
| 1 | 1 |  |  |
| 1 | 0 |  |  |
| 0 | 1 |  |  |
| 0 | 0 |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | A $∨B$ | B $∨A$ |
| 1 | 1 |  |  |
| 1 | 0 |  |  |
| 0 | 1 |  |  |
| 0 | 0 |  |  |

Assoziativgesetze

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | (A $∧B)$ $∧C$ | A $∧(B$ $∧C)$ |
| 1 | 1 | 1 |  |  |
| 1 | 1 | 0 |  |  |
| 1 | 0 | 1 |  |  |
| 1 | 0 | 0 |  |  |
| 0 | 1 | 1 |  |  |
| 0 | 1 | 0 |  |  |
| 0 | 0 | 1 |  |  |
| 0 | 0 | 0 |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | (A $∨B) ∨C$ | A $∨(B ∨C)$ |
| 1 | 1 | 1 |  |  |
| 1 | 1 | 0 |  |  |
| 1 | 0 | 1 |  |  |
| 1 | 0 | 0 |  |  |
| 0 | 1 | 1 |  |  |
| 0 | 1 | 0 |  |  |
| 0 | 0 | 1 |  |  |
| 0 | 0 | 0 |  |  |

Idempotenzgesetze

|  |  |
| --- | --- |
| A | A $∧A$ |
| 1 |  |
| 0 |  |

|  |  |
| --- | --- |
| A | A $∨A$ |
| 1 |  |
| 0 |  |

Distributivgesetze

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | A $\bigwedge\_{}^{}(B ∨C)$ | (A $∧B) ∨(A ∧C)$ |
| 1 | 1 | 1 |  |  |
| 1 | 1 | 0 |  |  |
| 1 | 0 | 1 |  |  |
| 1 | 0 | 0 |  |  |
| 0 | 1 | 1 |  |  |
| 0 | 1 | 0 |  |  |
| 0 | 0 | 1 |  |  |
| 0 | 0 | 0 |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | A $∨(B ∧C)$ | (A $∨B) ∧(A ∨C)$ |
| 1 | 1 | 1 |  |  |
| 1 | 1 | 0 |  |  |
| 1 | 0 | 1 |  |  |
| 1 | 0 | 0 |  |  |
| 0 | 1 | 1 |  |  |
| 0 | 1 | 0 |  |  |
| 0 | 0 | 1 |  |  |
| 0 | 0 | 0 |  |  |

Neutralitätsgesetze

|  |  |
| --- | --- |
| A | A $∧1$ |
| 1 |  |
| 0 |  |

|  |  |
| --- | --- |
| A | A $∨0$ |
| 1 |  |
| 0 |  |

Extremalgesetze

|  |  |
| --- | --- |
| A | A $∧0$ |
| 1 |  |
| 0 |  |

|  |  |
| --- | --- |
| A | A $∨1$ |
| 1 |  |
| 0 |  |