1. (M∆N)∆O = M∆(N∆O) 🡪 (((M\N)u(N\M)\O)u(O\((M\N)u(N\M))) = (M\((N\O)u(O\N)))u(((N\O)u(O\N))\M)

Wahrheitstabelle 1 für „(((M\N)u(N\M)\O)u(O\((M\N)u(N\M)))“

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | N | O | M\N | N\M | (M\N)u(N\M) | (M\N)u(N\M)\O | O\((M\N)u(N\M)) | (((M\N)u(N\M)\O)u(O\((M\N)u(N\M))) |
| W | W | W | F | F | F | F | W | W |
| W | W | F | F | F | F | F | F | F |
| W | F | W | W | F | W | F | F | F |
| F | W | W | F | W | W | F | F | F |
| W | F | F | W | F | W | W | F | W |
| F | W | F | F | W | W | W | F | W |
| F | F | W | F | F | F | F | W | W |
| F | F | F | F | F | F | F | F | F |

Wahrheitstabelle 2 für „(M\((N\O)u(O\N)))u(((N\O)u(O\N))\M)“

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | N | O | N\O | O\N | (N\O)u(O\N) | M\(N\O)u(O\N) | ((N\O)u(O\N))\M | (M\((N\O)u(O\N)))u(((N\O)u(O\N))\M |
| W | W | W | F | F | F | W | F | W |
| W | W | F | W | F | W | F | F | F |
| W | F | W | F | W | W | F | F | F |
| F | W | W | F | F | F | F | F | F |
| W | F | F | F | F | F | W | F | W |
| F | W | F | W | F | W | F | W | W |
| F | F | W | F | W | W | F | W | W |
| F | F | F | F | F | F | F | F | F |

1. M∆N = N∆M 🡪 (M\N)u(N\M) = (N\M)u(M\N)

Wahrheitstabelle 1 für „(M\N)u(N\M)“

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| M | N | M\N | N\M | (M\N)u(N\M) |
| W | W | F | F | F |
| W | F | W | F | W |
| F | W | F | W | W |
| F | F | F | F | F |

Wahrheitstabelle 2 für „(N\M)u(M\N)“

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| M | N | N\M | M\N | (N\M)u(M\N) |
| W | W | F | F | F |
| W | F | F | W | W |
| F | W | W | F | W |
| F | F | F | f | F |

1. M∆N = ∅ ⇔ M = N. 🡪 (M\N)u(N\M) = ({} \ {}) u ({} \ {})

Wahrheitstabelle 1 für „(M\N)u(N\M)“

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| M | N | M\N | N\M | (M\N)u(N\M) |
| W | W | F | F | F |
| F | F | F | F | F |

Wahrheitstabelle 2 für „{}“

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| {} | {} | {}\{} | {}\{} | ({}\{})u({}\{}) |
| W | W | F | F | F |
| F | F | F | F | F |