I - (A ∧ B)' → B'

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | B’ | (A ∧ B) | (A ∧ B) ∨ B’ |
| F | F | V | F | V |
| F | V | F | F | F |
| V | F | V | F | V |
| V | V | F | V | V |

II - (C → D) ↔ (E ∨ D')

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| C | D | E | (C → D) |  |  |
| F | F | F |  |  |  |
| F | F | V |  |  |  |
| F | V | F |  |  |  |
| F | V | V |  |  |  |
| V | F | F |  |  |  |
| V | F | V |  |  |  |
| V | V | F |  |  |  |
| V | V | V |  |  |  |

III - (A ∧ B) ∨ (A' ∧ B) ∨ (A ∨ B)'

(A ∧ B)' → B'

A’ ∧ B’ 🡪 B’

A 🡪 B = A’ v B

((A ∧ B)’)’ v B