9.1.4 Demonstrati ca formula urmatoare este o tautologie utilizand metoda tabelului de adevar.

5. semidistributivitatea la stanga a conectivei “ ˅” fata de “ →”

U: p˅(q→r)→((p˅q)→(p˅r))

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | p | q | r | q→r | p˅(q→r) | (p˅q) | (p˅r) | (p˅q)→(p˅r) | p˅(q→r)→((p˅q)→(p˅r)) |
| i1 | T | T | T | T | T | T | T | T | T |
| i2 | T | T | F | F | T | T | T | T | T |
| i3 | T | F | T | T | T | T | T | T | T |
| I4 | T | F | F | T | T | T | T | T | T |
| I5 | F | T | T | T | T | T | T | T | T |
| I6 | F | T | F | F | F | T | F | F | T |
| I7 | F | F | T | T | T | F | T | T | T |
| I8 | F | F | F | T | T | F | F | T | T |

U este o tautologie deoarece este evaluata ca fiind adevarata in toate interpretarile.