NAME:MBATO CHIZULE TEDDY

 MAT NO: 18/SCI01/051

 COURSE: CSC 202

PROVE THAT

A\*(B+C)=(A\*B)+(A\*C)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | (B+C) | (A\*B) | (A\*C) | A\*(B+C) | (A\*B)+(A\*C) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

 SINCE THE 7th AND 8th COLUMN ARE THE SAME

THEREFORE A\*(B+C)=(A\*B)+(A\*C).