**JOHNSON DAVID ALEX**

**18/SCI01/047**

**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)+(B\*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 GIVE THE SAME RESULT, THERFORE**

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