ABOYEJI OLUWAPELUMI JOSEPH 18/SCI01/003

CSC 202 ASSIGNMENT

PROVE THAT ;

 $A^{*}(B+C) = (A^{*}B) + (A^{*}C)$

| Α | В | С | (B+ | (A*B | (A* | A*(B+ | (A*B)+(B* |
|---|---|---|-----|------|-----|-------|-----------|
| | | | C) |) | C) | (C) | 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

 $A^{*}(B+C) = (A^{*}B) + (A^{*}C)$