|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A  | B | C | B+C  | A×(B+C) |
| 1  | 1 | 1 | 1 | 1 |
| 1  | 1 | 0 | 1 | 1 |
| 1 | 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 |
| 0 | 1 | 0 | 1 | 0 |
| 0 | 0 | 1 | 1 | 0 |
| 0 | 0 | 0 | 0 | 0 |

= A×B + A×C

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A  | B | C | A×B  | A×C | A×B + A×C |
| 1  | 1 | 1 | 1  | 1 | 1 |
| 1 | 1 | 0 | 1 | 0 | 1 |
| 1 | 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 |

To show that A×(B+C)= A×B + A×C

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A  | B | C | B+C  | A×(B+C) | A× B | A×C | (A×B)+ (A×C) |
| 1  | 1 | 1 | 1 | 1 | 1  | 1 | 1  |
| 1  | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |

BY HARIM BELLO SHEHU MATRIC NO 19/SCI01/100