|  |  |  |  |
| --- | --- | --- | --- |
| X | Y | Z | OUTPUT |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 |
| 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 |

OUTPUT = 001 010 011 111

OUTPUT = (X’Y’Z) + X’YZ’ + (X’YZ) + XYZ

UNITING LAW = XY + XY’ = X

OUTPUT = X’Y’Z + X’YZ’ + X’YZ + X’YZ + X’YZ + XYZ

IDEMPOTENCY (X + X = X)

OUTPUT = X’Y’Z + X’YZ’ + X’YZ + X’YZ + YZ

UNITING

OUTPUT = X’Y’Z + X’Y + X’YZ + YZ

UNITING

OUTPUT = X’Z + X’Y + YZ

UNITING

