Nand

|  |  |  |
| --- | --- | --- |
| 0 | 0 | **1** |
| 0 | 1 | **1** |
| 1 | 0 | **1** |
| 1 | 1 | **0** |

Not

|  |  |
| --- | --- |
| 0 | **1** |
| 1 | **0** |

And

|  |  |  |
| --- | --- | --- |
| 0 | 0 | **0** |
| 0 | 1 | **0** |
| 1 | 0 | **0** |
| 1 | 1 | **1** |

Or

|  |  |  |
| --- | --- | --- |
| 0 | 0 | **0** |
| 0 | 1 | **1** |
| 1 | 0 | **1** |
| 1 | 1 | **1** |

xor

|  |  |  |  |
| --- | --- | --- | --- |
| 0 | 0 | **0** |  |
| 0 | 1 | **1** | **notA and B** |
| 1 | 0 | **1** | **A and notB** |
| 1 | 1 | **0** |  |

Y = (notA and B) or (A and notB)