C = (AB)’ (NAND)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | AB | (AB)’ |  |  |
| 0 | 0 | 0 | 1 |  |  |
| 0 | 1 | 0 | 1 |  |  |
| 1 | 0 | 0 | 1 |  |  |
| 1 | 1 | 1 | 0 |  |  |

C = A’B’

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | A’ | B’ | A’B’ |  |
| 0 | 0 | 1 | 1 | 1 |  |
| 0 | 1 | 1 | 0 | 0 |  |
| 1 | 0 | 0 | 1 | 0 |  |
| 1 | 1 | 0 | 0 | 0 |  |

C = (A+B)’ (NOR)

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | A+B | (A+B)’ |
| 0 | 0 | 0 | 1 |
| 0 | 1 | 1 | 0 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 |

C = A’ + B’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | A’ | B’ | A’ + B’ |
| 0 | 0 | 1 | 1 | 1 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 | 1 |
| 1 | 1 | 0 | 0 | 0 |

Lecture Activity (draw the diagram use draw.io or similar tool)

|  |  |  |
| --- | --- | --- |
| A | B | Compare Equal |
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

A’B’ + AB