**Мартасов Илья, группа ИП-711**

**Лабораторная работа №4**

**1. a)** **F=not (a \* b) = not a + not b**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **F** |
| **0** | **0** | **1** |
| **0** | **1** | **1** |
| **1** | **0** | **1** |
| **1** | **1** | **0** |

**b) F=(not a + not b) \* a = not a \* a + not b \* a**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **F** |
| **0** | **0** | **0** |
| **0** | **1** | **0** |
| **1** | **0** | **1** |
| **1** | **1** | **0** |

**c) F=not (a + b) xor (not a \* not b) = (not a \* not b) xor (not a \* not b)**

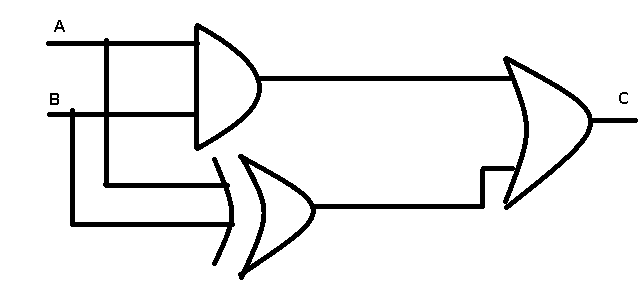
|  |  |  |
| --- | --- | --- |
| **a** | **b** | **F** |
| **0** | **0** | **0** |
| **0** | **1** | **0** |
| **1** | **0** | **0** |
| **1** | **1** | **0** |

**2. a xor b = not a \* b + a \* not b**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **a xor b** |
| **0** | **0** | **0** |
| **0** | **1** | **1** |
| **1** | **0** | **1** |
| **1** | **1** | **0** |

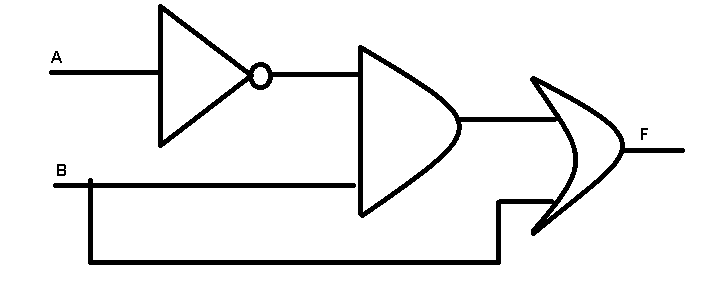
**3. C = (a \* b) + (a xor b)**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **C** |
| **0** | **0** | **0** |
| **0** | **1** | **1** |
| **1** | **0** | **1** |
| **1** | **1** | **1** |

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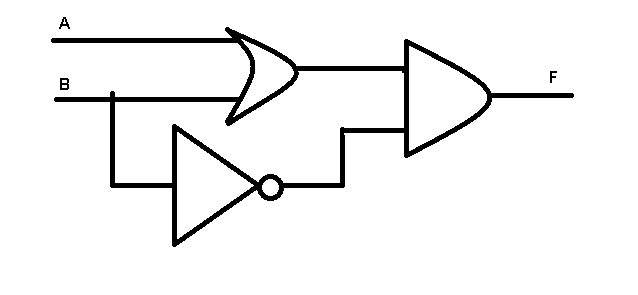
**4. F = (not a \* b) + b**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **F** |
| **0** | **0** | **0** |
| **0** | **1** | **1** |
| **1** | **0** | **0** |
| **1** | **1** | **1** |

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**5. F = (a + b)\*not b**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **F** |
| **0** | **0** | **0** |
| **0** | **1** | **0** |
| **1** | **0** | **1** |
| **1** | **1** | **0** |

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