**Binary Logic Hwk**

1. Draw the symbols for the three logic gates: NOT, AND and OR. Hint (use <insert><shapes>)
2. Show the truth tables for the three logic gates: NOT, AND and OR.
3. (a) Draw the logic circuit diagram for the expression:

**T= NOT (NOT A AND B)**

1. (b) Complete the truth table for this circuit

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A** | **B** | **NOT A** | **(NOT A AND B)** | **T** |
| 0 | 0 | 1 | 0 | 1 |
| 0 | 1 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

5) (a) Write the logical expression for this logic circuit.

A

B

K

C

1. (b) Complete the truth table (below) for this circuit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **A** | **B** | **C** | **NOT B** | **A OR NOT B** | **K** |
| 0 | 0 | 0 | 1 |  |  |
| 0 | 0 | 1 |  | 1 |  |
|  |  |  | 0 |  |  |
|  |  |  |  |  |  |
| 1 | 0 | 0 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | 1 | 0 |
| 1 | 1 | 1 | 0 |  |  |