## Digital Logic

HW\#1 - due Thursday
Below is a logic circuit that has two inputs, A and B , and one output G. Fill in the truth table showing the logic state, 0 or 1 , that output G will have for all combinations of inputs A and B .
hint: it may be helpful to write a set of logic values ( 0 or 1 ) for A and B on the respective wires (lines) going into the gates and then trace through the circuit, starting on the left and going to the right, writing the resulting output of each gate on the diagram. Use the truth tables we reviewed in class for AND, OR, and Invert (also called NOT) to figure out the output of each gate.
Continue until you get to output G and then enter the value of G in the truth table. Repeat for each combination of A and B.


| $A$ | $B$ | $G$ |
| :--- | :--- | :--- |
| 0 | 0 |  |
| 0 | 1 |  |
| 1 | 0 |  |
| 1 | 1 |  |

