


# LOGIC GATES

# TRUTH TABLES

## AND




Circuit Symbol:

The output is only on if \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Inputs		Output
A	B	Q
0	0	
1	0	
0	1	
1	1	

## OR

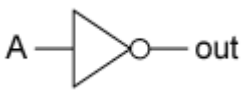


Circuit Symbol:

The output is only on if \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Inputs		Output
A	B	Q
0	0	
1	0	
0	1	
1	1	

## NOT



Circuit Symbol:

The output is only on if \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Inputs		Output
A	-	Q
0	-	
1	-	
0	-	
1	-	

## 4000 series Logic Gates

All the logic gates that we use come in 14 pin Integrated circuits.

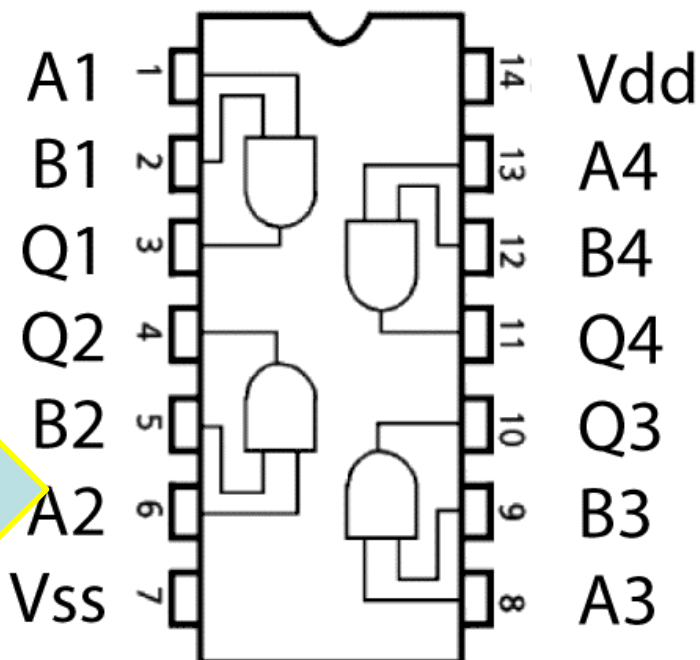
Pin 14 always goes to +V , (Vdd)

Pin 7 always goes to 0V. (Vss)

For example...

### 4081 Quad 2 input AND Gate

This an example of a commonly used Logic Gate



# Logic Gates

<u>Inputs</u>		<u>Output</u>
A	B	Q
0	0	
1	0	
0	1	
1	1	