

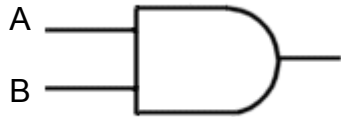
## Logic Gate Worksheet

1. A Logic circuit has two inputs being **X** and **Y**  
fill in all the possible combinations.

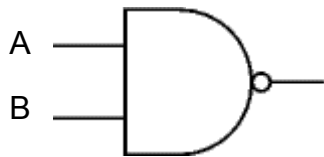
<b>X</b>	<b>Y</b>

2. Name the Logic Gate and make a truth Table for each of the following :

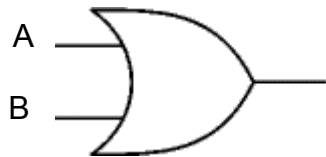
a.



b.



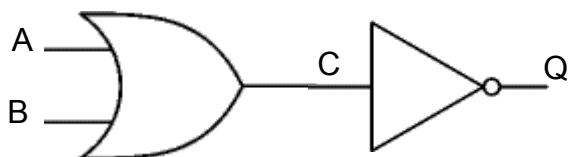
c.



d.

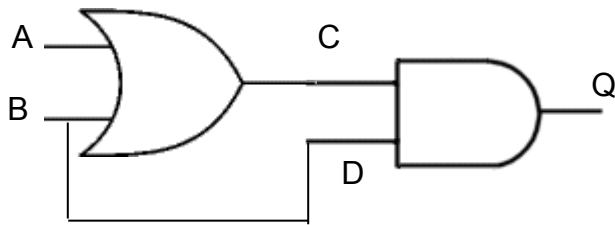


3. The figure below shows a logic circuit and its incomplete truth table. Complete the below truth table.



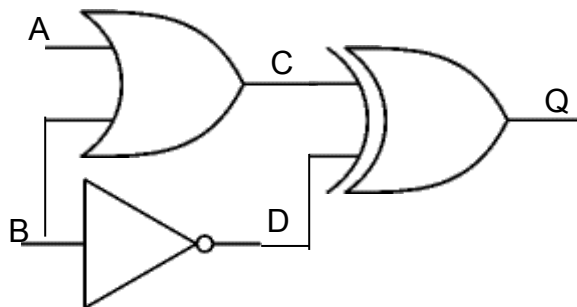
Inputs		Outputs	
<b>A</b>	<b>B</b>	<b>C</b>	<b>Q</b>
0	0		
0	1		
1	0		
1	1		

4. The figure below shows a logic circuit and its incomplete truth table. Complete its truth table.



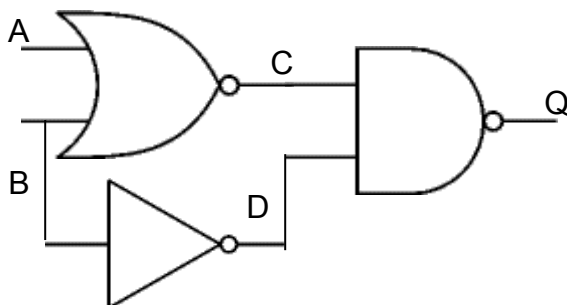
A	B	C	D	Q
0	0			
0	1			
1	0			
1	1			

5. The figure below shows a logic circuit and its incomplete truth table. Complete the below truth table.



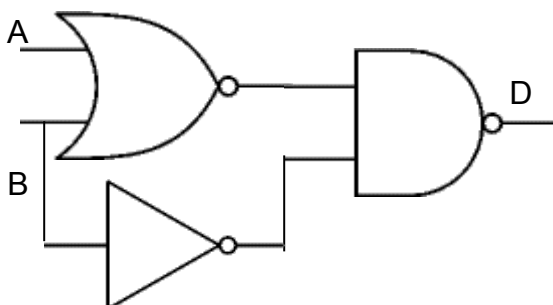
A	B	C	D	Q

6. The figure below shows a logic circuit and its incomplete truth table. Complete the below truth table.



A	B	C	D	Q

7. For the logic circuit below complete the truth table.



A	B			D

## Answers:

1.

<b>X</b>	<b>Y</b>
1	0
1	1
0	0
0	1

2. a) 0                      b) 1                      c) 1                      d) 1

3.

<b>A</b>	<b>B</b>	<b>C</b>	<b>Q</b>
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0

4.

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Q</b>
0	0	0	0	0
0	1	1	1	1
1	0	1	0	0
1	1	1	1	1

5.

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Q</b>
0	0	0	1	1
0	1	1	0	1
1	0	1	1	0
1	1	1	0	1

6.

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Q</b>
0	0	1	1	0
0	1	0	0	1
1	0	0	1	1
1	1	0	0	1

7.

<b>A</b>	<b>B</b>			<b>D</b>
0	0			0
0	1			1
1	0			1
1	1			1