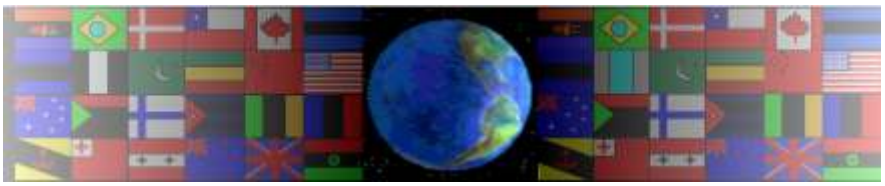
DIGITAL LOGIC CIRCUITS

On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

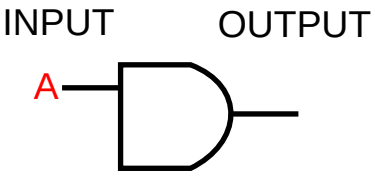
This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet .

DIGITAL LOGIC TABLES AND GATES

1. Complete the AND and NAND logic tables and symbols seen below.

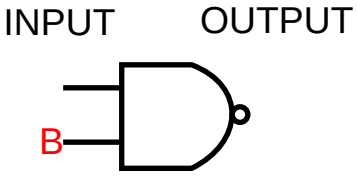
AND gate

A	B	Q
0		0
	1	
1	0	0
1		



NAND gate

A	B	Q
	0	1
0	1	
1		1
	1	

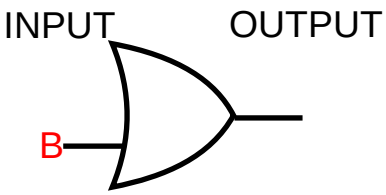


2. How does the NAND gate differ from an AND gate?

3. Complete the OR and NOR logic tables and symbols seen below.

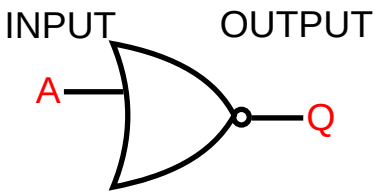
OR gate

A	B	
0		0
	1	1
1		1
1	1	



NOR gate

A		Q
	0	1
0	1	
1		0
	1	0

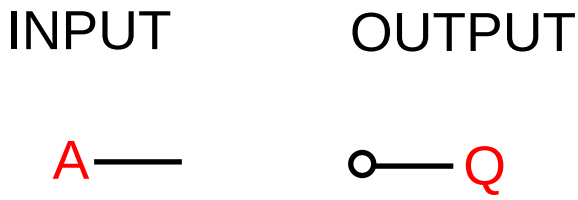


4. How does the NOR gate differ from an OR gate?

5. Complete the INVERTER table and symbols seen below.

INVERTER gate

A	
0	1
	0



6. What is the function of an INVERTER GATE?