

Recitation 12 Practice - Computer Organization, Spring 2013

1. According to the truth table , design the digital circuit .

0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

Appendix: gates

		y	
\wedge		0	1
x	0	0	0
	1	0	1

		y	
\vee		0	1
x	0	0	1
	1	1	1

		y	
\rightarrow		0	1
x	0	1	1
	1	0	1

		y	
\oplus		0	1
x	0	0	1
	1	1	0

Figure 1. Truth tables

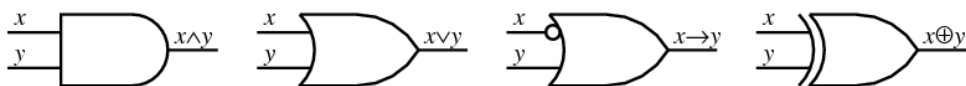


Figure 2. Logic gates

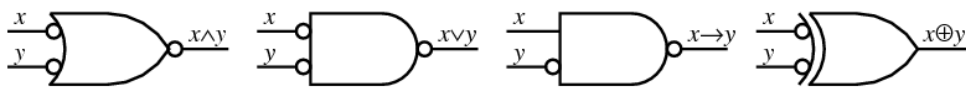


Figure 3. De Morgan equivalents



Figure 4. Venn diagrams