Digital Logic Design
Errata

- Page 6: Table 1-1. The symbol for milli- should be **m** instead of M.
- Page 40: Hamming Distance, last line in second paragraph:
  "… of a code by *k*/*p*" should be "… of a code by *k*/***n***".
- Page 43: 2-19. "Which of … in Figure 2.4?"
  The correct figure should be "**Figure 2.2**".
- Page 76: Figure 4-29.
  The signal for *B* in the figure on the right is incorrect. The correct diagram is shown below:

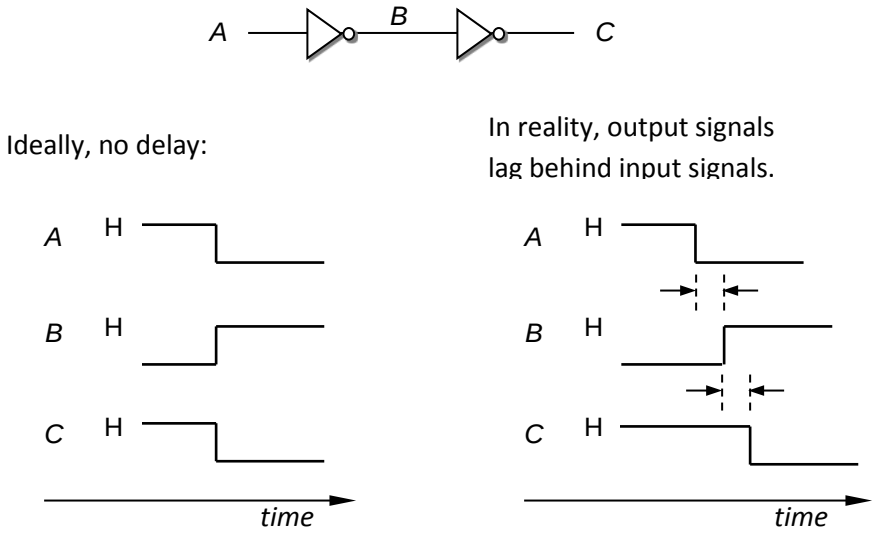


Figure 4-29 Propagation delay in a circuit.

- Page 185: Figure 8.23. Missing label "0/0" from state 0 to state 1.
- Page 240: Answer for 2-29. Smallest negative value should be **-31.75**.
- Page 242: Answer for 6-6. The truth table, expressions and circuit for *W* are wrong.
  Please see page 2 for correct answers.
- Page 246: Answer for 8-11. The next states for the unused states, and the state diagram are wrong. Please see page 3 for correct answers.

Chapter 6

6-6.

A	*B*	*C*	*D*	*W*	*X*	*Y*	*Z*
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1
0	0	1	0	0	0	1	0
0	0	1	1	0	0	1	1
0	1	0	0	0	1	0	0
0	1	0	1	0	1	0	1
0	1	1	0	0	1	1	0
0	1	1	1	0	1	1	1

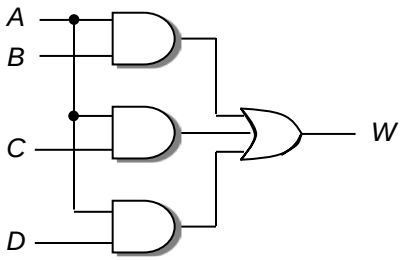
A	*B*	*C*	*D*	*W*	*X*	*Y*	*Z*
1	0	0	0	0	0	0	0
1	0	0	1	1	1	1	1
1	0	1	0	1	1	1	0
1	0	1	1	1	1	0	1
1	1	0	0	1	1	0	0
1	1	0	1	1	0	1	1
1	1	1	0	1	0	1	0
1	1	1	1	1	0	0	1

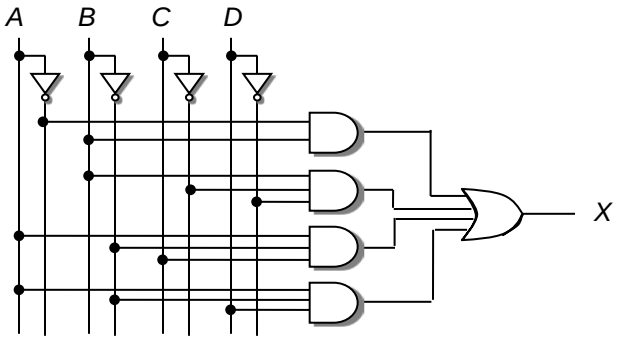
W = A·B + A·C + A·D ; ***W = A·(B+C+D)***

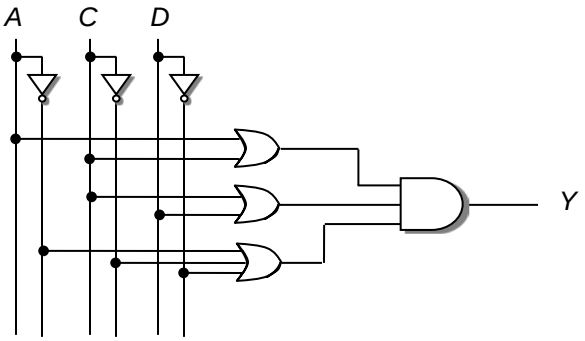
X = A'·B + B·C'·D' + A·B'·C + A·B'·D ; ***X = (A+B)·(B+C+D)·(A'+B'+C')·(A'+B'+D')***

Y = A'·C + C·D' + A·C'·D ; ***Y = (A+C)·(C+D)·(A'+C'+D')***

Z = D ; ***Z = D***







Chapter 8

8-11. ***TA = A·B + B·C* or *A·B + A′·C***

TB = C

TC = A′ + B′

The following are the next states for the unused states:

000 → 001

001 → 010 or 110

111 → 001

The circuit is self-correcting.

Present state			Next state			Flip-flop inputs		
A	*B*	*C*	A^+	B^+	C^+	*TA*	*TB*	*TC*
0	0	0	X	X	X	X	X	X
0	0	1	X	X	X	X	X	X
0	1	0	0	1	1	0	0	1
0	1	1	1	0	0	1	1	1
1	0	0	1	0	1	0	0	1
1	0	1	1	1	0	0	1	1
1	1	0	0	1	0	1	0	0
1	1	1	X	X	X	X	X	X