

SER 232 Quiz 2 Book Practice Problems

Solution

- 2.32: $F = (ab' + b)'$
- 2.33: $F = (ab' + b) + a'c$
- 2.35:

a)

a	b	c	F
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0

c)

a	b	c	F
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

b)

a	b	c	F
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

d)

a	b	c	d	F
0	0	0	0	1
0	0	0	1	0
0	0	1	0	1
0	0	1	1	0
0	1	0	0	1
0	1	0	1	0
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	0
1	1	0	0	1
1	1	0	1	0
1	1	1	0	1
1	1	1	1	0

- 2.43:

Inputs		Outputs
a	b	F
0	0	1
0	1	0
1	0	0
1	1	0

- 2.44:

Inputs					Outputs
a	b	c	$ab' + b$	$a'c$	F
0	0	0	0	0	0
0	0	1	0	1	1
0	1	0	1	0	1
0	1	1	1	1	1
1	0	0	1	0	1
1	0	1	1	0	1
1	1	0	1	0	1
1	1	1	1	0	1

- 2.48:

- $F(a, b, c) = a'bc + abc' + abc$
- $F(a, b, c) = a'bc' + a'bc$
- $F(a, b, c) = a'b'c + a'bc' + a'bc + ab'c' + ab'c + abc' + abc$
- $F(a, b, c) = a'b'c' + a'bc' + ab'c' + abc'$