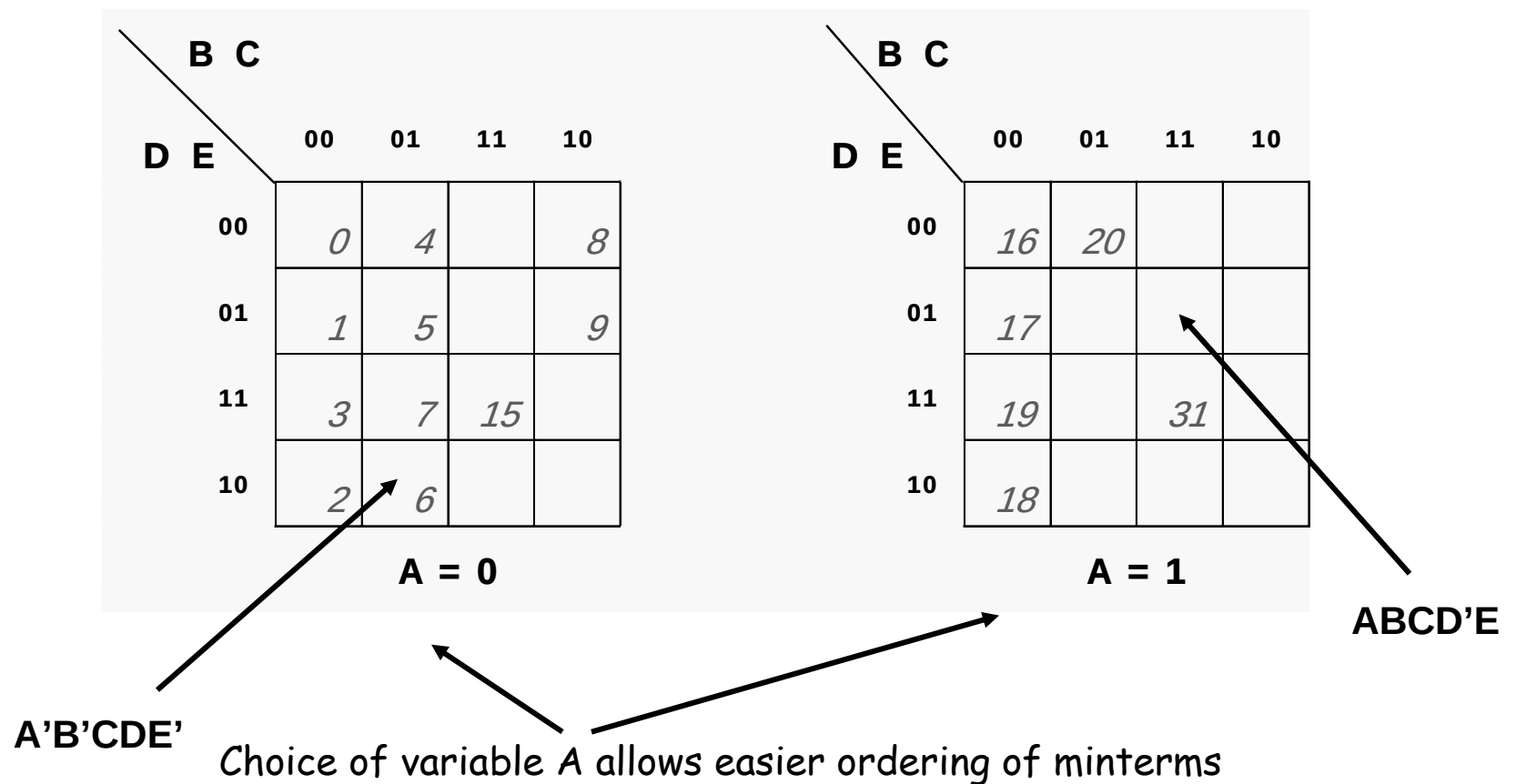
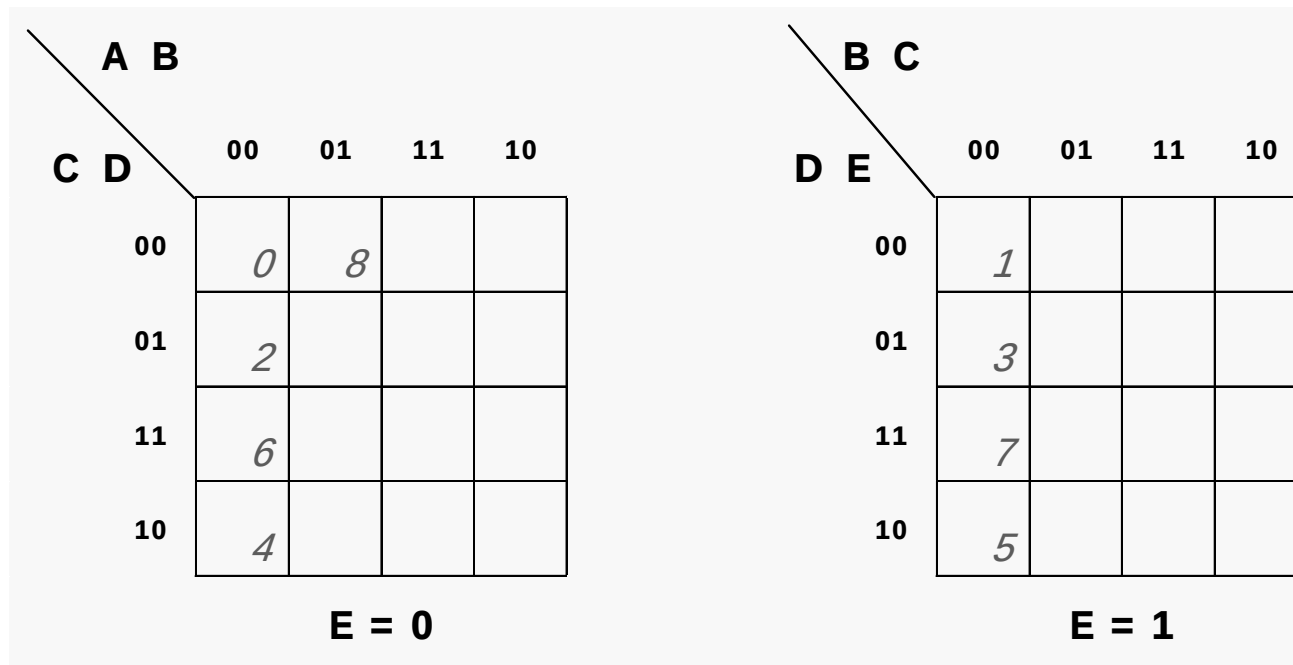


5 Variable Karnaugh Map

(a little different approach than the book)



5 Variable Karnaugh Map



Choice of variable E is harder; other choices are worse

5 Variable Karnaugh Map

Find the minimum sum-of-products for:

$$H(A,B,C,D,E) = \sum m (0,2,6,7,8,10-14,16,18,19,29,30) + \sum d (4, 9, 21)$$

B C					
		00	01	11	10
D E	00	1	X	1	1
	01			1	X
	11		1		1
	10	1	1	1	1

A = 0

B C					
		00	01	11	10
D E	00	1			
	01		X	1	
	11	1			
	10	1		1	

A = 1

1. Find prime implicants of size 16
2. Find prime implicants of size 8
3. Find prime implicants of size 4
4. Find prime implicants of size 2

A'E'

A'BC'

A'BD'

B'C'E'

A'B'CD

AB'C'D

ACD'E

BCD'E

BCDE'