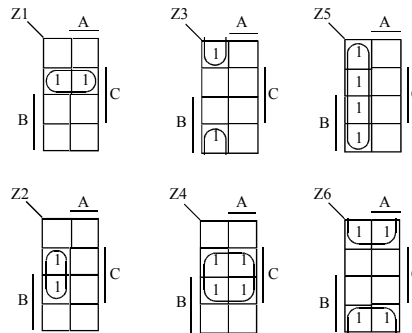


□ Basic Karnaugh Map Groupings for Three-Variable Maps.



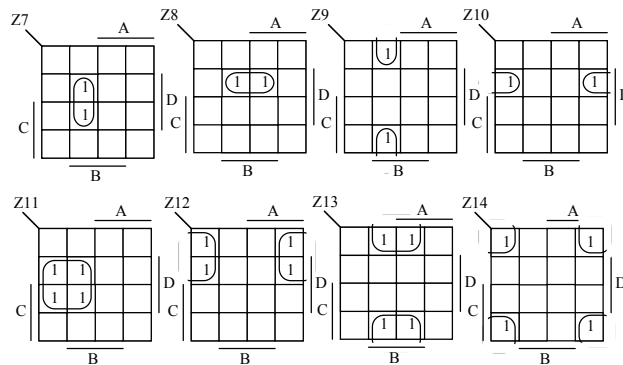
Elec 326

9

Karnaugh Maps

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Page 5 of 17

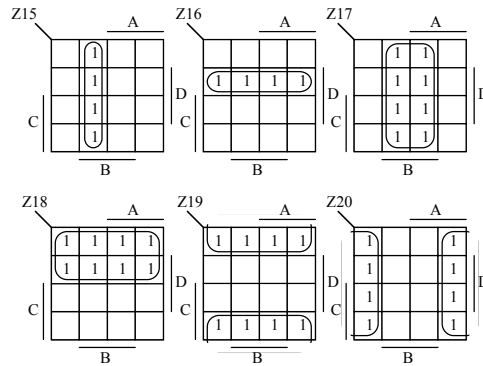
□ Basic Karnaugh Map Groupings for Four-Variable Maps.



Elec 326

10

Karnaugh Maps



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Page 6 of 17

□ Rules for Grouping:

- The number of squares in a grouping is 2^i for some i such that $1 \leq i \leq k$.
- There are exactly $k-i$ variables that have constant value for all squares in the grouping.

□ Resulting Product Terms:

- If X is a variable that has value 0 in **all** of the squares in the grouping, then the literal X' is in the product term.
- If X is a variable that has value 1 in all of the squares in the grouping, then the literal X is in the product term.
- If X is a variable that has value 0 for some squares in the grouping and value 1 for others, then neither X' nor X are in the product term.