

CSCI 211 Spring 2009

QUIZ 7

Assigned Friday, 09-03-27

Draw a Karnaugh map of 4 variables. Name them A, B, C, and D. Label the rows and the columns with the values (0 or 1) of the appropriate variables. Draw braces for A, B, C, and D (as in a Veitch diagram). Label each of the 16 squares ("boxes") with the number of the corresponding minterm.

Answer: The resulting table is the combination of those shown in two figures of your text. Figure 5-10 labels rows with 00, 01, 11, 10 (top to bottom), columns in the same way (left to right), and squares 0, 1, 3, 2, 4, 5, 7, 6, 12, 13, 15, 14, 8, 9, 11, 10 (in column-major order). The right side of Figure 5-27 shows a Veitch diagram for four variables, in which A labels the two rightmost columns, B the two middle columns, C labels the two bottom columns, and D the two middle columns.