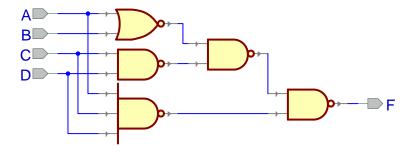
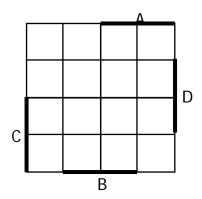
Given the following schematic:

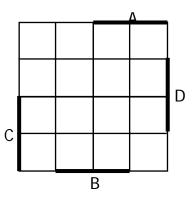


Write down the Boolean expression corresponding to F (in any form).

Write the expression in sum-of-products form (Σ notation).

Fill in the K-map below on the left.





We also know that this function is a don't care for the cases where A'CD is true. Fill in the modified K-map above on the right.

Find a minimum sum-of-products expression for this incompletely specified function.

Circle the essential prime implicants in your expression above.