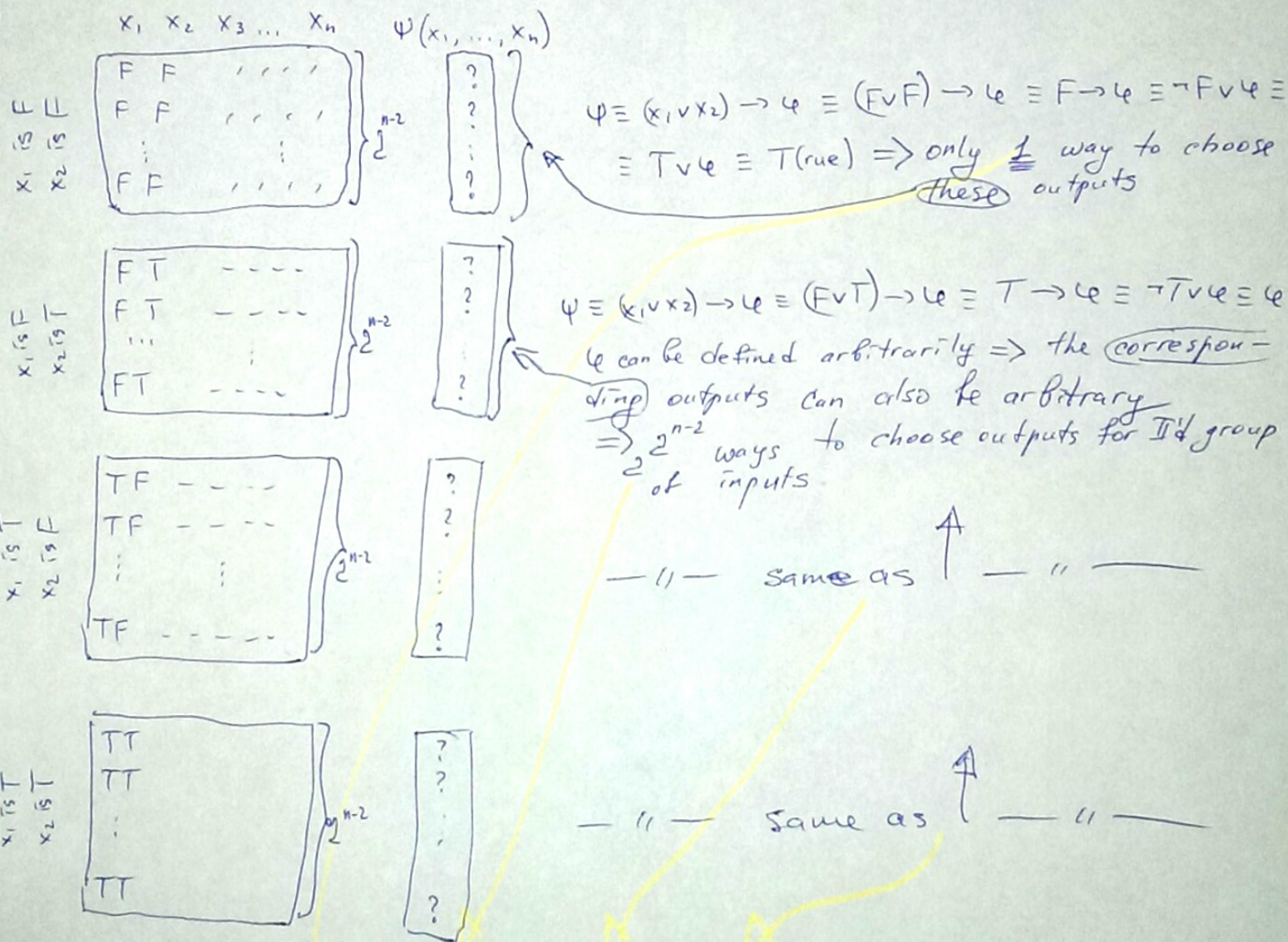


$n \geq 2$

$\#_n =$ number of logical propositions (only unique ones count) of the form $(x_1 \vee x_2) \rightarrow \psi(x_1, \dots, x_n) \equiv \Psi(x_1, \dots, x_n)$

Idea: split the inputs of a truth table into 4 groups with respect to the values of x_1 and x_2 , and, for each group, count the number of possible output assignments.



$$\Rightarrow \#_n = 1 \times 2^{n-2} \times 2^{n-2} \times 2^{n-2} = 2^{3 \cdot 2^{n-2}}$$