Duality
- a new, true statement can be found be
    - 0 <=> 1
    - AND <=> OR
- X+1=1 => X*0=0

Checkers/Decoders
- an AND gate only output "1" for 1 combination
- place inverters at the input of the AND gates
- an OR gate only outputs "0" for 1 combination

Circuit Design and Analysis
- circuit design/synthesis - take a set of requirements or functional descriptions and arrive at a logic circuit
- circuit analysis - given a logic circuit, find or verify the logic function it implements

Two approaches
- minterms
    - Using AND gate checkers, then combining their results with OR gate
- maxterms
    - USing OR gate checkers, then combining their results with AND gate
- Similar to CNF/DNF

We can now convert any truth table into an equation and circuit by using midterms or maxterms.
But minterms/maxterms yield the LARGEST equation/circuit.
By starting with sum of midterm (product of maxterms) form and then using Boolean algebra to simplify, we can arrive at smaller circuits.