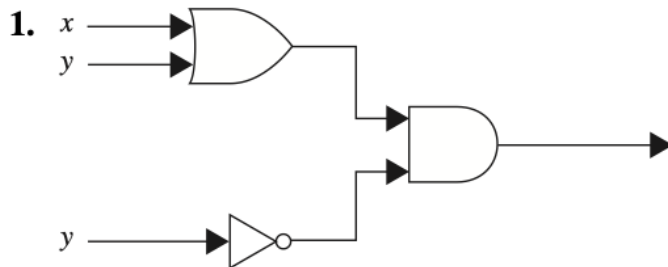


Ping Ju

1. PROBLEM

In Exercises 1–5 find the output of the given circuit.

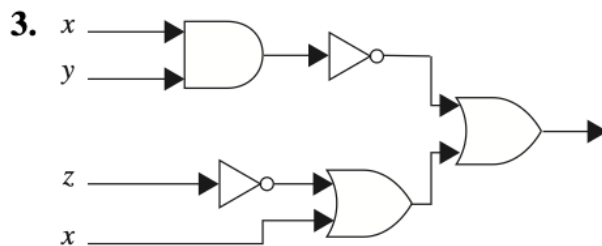


The output of the OR gate at the top is $x + y$.

The top and \bar{y} are the inputs to the final AND gate.

The answer \Rightarrow the output of the circuit is $(x + y) \bar{y}$.

3. Problem:



The final output is an OR with two inputs.

The first of these inputs is the result of inverting xy , and the second is $\bar{z} + x$.

The answer is $\Rightarrow (\overline{xy}) + (\bar{z} + x)$.